Massachusetts Electric Company and Nantucket Electric Company d/b/a National Grid

Annual Retail Rate Filing

Book 2 of 3

Testimony and Exhibits of Susan L. Hodgson and Scott M. McCabe

January 27, 2006

Submitted to:
Massachusetts Department of
Telecommunications and Energy
Docket No. D.T.E. 06-\_\_\_

Submitted by:

nationalgrid

NATIONAL GRID Docket No. D.T.E. 06-\_ Witness: Susan L. Hodgson

# DIRECT TESTIMONY

**OF** 

SUSAN L. HODGSON

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1	I.	Introduction and Qualifications
2	Q.	Please state your name and business address.
3	A.	My name is Susan L. Hodgson. My business address is 300 Erie Boulevard West,
4		Syracuse, New York 13202.
5		
6	Q.	By whom are you employed and in what capacity?
7	A.	I am employed by National Grid USA Service Company, Inc. ("Company") as
8		Manager, Transmission Rates in the Transmission Finance group. My
9		responsibilities include the administration and development of transmission tariffs
10		and transmission rates for National Grid, which includes New England Power
11		("NEP") in New England and Niagara Mohawk Power Corporation in New York.
12		My team provides support for NEP's transmission rate filings at the Federal
13		Energy Regulatory Commission ("FERC"), monitors ISO New England ("ISO-
14		NE") and New York ISO ("NYISO") Transmission Tariffs, and is involved with
15		many transmission pricing policy and regulatory matters.
16		
17	Q.	Please describe your educational and professional background.
18	A.	I graduated Magna Cum Laude from Syracuse University in Syracuse, New York
19		in 1996 with a Bachelor of Science from the School of Management with a major
20		in Managerial Statistics. I have held a number of positions with the Company,
21		including Manager of Transmission & Delivery Services, and was a staff member
22		in the Electric Pricing, the Regulatory Proceedings and the Power Contracts
23		departments. I have submitted testimony to FERC in Docket No. ER97-1523-000

and have testified before FERC in Docket No. EL02-111-000, and have submitted

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1		testimony and testified in retail rate cases before the New York State Public
2		Service Commission.
3		
4	II.	Purpose of Testimony
5	Q.	What is the purpose of your testimony?
6	A.	My testimony addresses the estimated transmission expenses and ISO-NE
7		expenses for Massachusetts Electric Company and Nantucket Electric Company
8		(together "Company") for the period March 1, 2006 through February 28, 2007.
9		First, I will summarize the various transmission services provided to the Company
10		and how the Company pays for such services. Second, I will address the
11		assumptions used in the development of the Company's estimated expenses as
12		shown in Exhibit SLH-1. Lastly, I will briefly explain the primary changes from
13		last year's forecasted expenses.
14		
15	III.	Summary of Transmission Services Provided to the Company
16	Q.	Please explain the history of the Company's transmission service under rate
17		schedules approved by the FERC.
18	A.	Effective March 1, 1998, the Company began taking transmission services, on
19		behalf of its entire customer base, under two tariffs: NEPOOL's FERC Electric
20		Tariff No. 1 ("NEPOOL Tariff") and NEP's FERC Electric Tariff No. 9 ("NEP T-
21		9 Tariff"). Additionally, effective January 1, 1999, the Company began taking
22		service under ISO-NE's FERC Electric Tariff No. 1 ("ISO-NE Tariff").

1		However, on February 10, 2005, FERC issued an order authorizing ISO-NE to
2		begin operating as a Regional Transmission Operator ("RTO") effective as of
3		February 1, 2005, ("ISO as the RTO"). At that time, ISO-NE replaced NEPOOL
4		as the transmission provider in New England. The new ISO New England
5		Transmission, Markets and Services Tariff ("ISO/RTO Tariff") replaced the three
6		separate tariffs referred to above by aggregating them into a single, omnibus
7		tariff. The Company is now only charged by NEP and ISO as the RTO under this
8		superseding omnibus tariff, because NEPOOL ceased to exist as a transmission
9		provider in New England. The terms, conditions and rate schedules from these
10		three separate tariffs have been transferred to the ISO/RTO Tariff as follows: the
11		NEP T-9 Tariff is captured in Schedule 21 and Schedule 21-NEP, the NEPOOL
12		Tariff is captured in Section II (up through and including Schedule 19), and the
13		ISO-NE Tariff is captured in Section IV.A. The prospective charges to the
14		Company, therefore, are separately identified as NEP local charges, ISO regional
15		charges (formerly NEPOOL), and ISO/RTO administrative charges.
16		
17	Q.	Please describe further the types of transmission service that the Company is
18		billed for under the ISO/RTO Tariff.
19	A.	New England's transmission rates utilize a highway/local pricing structure. That
20		is, the Company receives regional transmission service over "highway"
21		transmission facilities under Section II of the ISO/RTO Tariff, and receives local
22		transmission service over local transmission facilities under Schedule 21 of the
23		ISO/RTO Tariff. Additionally, transmission scheduling and market

1		administration services are provided to the Company under Section IV.A of the
2		ISO/RTO Tariff.
3		
4	A.	Explanation of ISO/RTO Tariff Services, Rates & Charges
5	Q.	Please explain the services provided to the Company under the ISO/RTO Tariff.
6	A.	Section II of the ISO/RTO Tariff provides access over New England's 69kV or
7		greater looped transmission facilities, more commonly known as Pool
8		Transmission Facilities ("PTF") or bulk transmission facilities. These facilities
9		serve as New England's electric transmission "highway", and the service
10		provided over these facilities is referred to as Regional Network Service ("RNS").
11		In addition, the ISO/RTO Tariff provides for Black Start, Reactive Power, and
12		Scheduling, System Control and Dispatch Services, as described more fully later
13		in this testimony.
14		
15	Q.	How are the costs for RNS recovered?
16	A.	The ISO RNS Rate ("RNS Rate") recovers the RNS costs and is determined
17		annually based on an aggregation of the transmission revenue requirements of
18		each of the transmission owners in New England, calculated in accordance with a
19		FERC-approved formula. Pursuant to a NEPOOL Settlement dated April 7, 1999,
20		and incorporated into the ISO/RTO Tariff, the RNS Rate continues to be in a
21		period of transition as the transmission rates move from zonal rates to a single,
22		"postage stamp" rate in New England. The transition will be complete in 2008
23		("NEPOOL Transition"). The NEPOOL Transition provides for a unique rate

derivation in that each transmission owner's RNS rate is determined by looking

1	separately at the costs associated with vintage PTF assets: (1) in-service at
2	December 1996 ("Pre-97 Property"), and (2) placed in-service after January 1,
3	1997 ("Post-96 Property").

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A.

Q. Please explain the rate derivation for Pre-97 Property under the ISO/RTO Tariff.

As mentioned above, the intent of the NEPOOL Transition is to move zonal transmission rates that previously had been in place in New England to a single, postage-stamp rate for the region. As part of that transition process, until the end of the transition period (2008), each transmission owner's zonal Pre-97 RNS Rate is adjusted based on the differential of the individual transmission owner's Pre-97 PTF Rate to the average Pre-97 Pool PTF Rate, based on a bandwidth which limits the variation of a transmission owner's per kilowatt cost from the average per kilowatt cost for all transmission owners. The bandwidth will shrink each year, moving the Pre-97 PTF Rate closer to the average until 2008 when the NEPOOL transition is complete and all PTF costs are recovered on a regionalized average basis. For example, in 2006, a bandwidth of 50% below the average and 112% above the average has been established, where each transmission owner's Pre-97 PTF Rate is held within that established bandwidth. To the extent a transmission owner's actual rate is less than 50% below the average or exceeds 112% of the average, the remaining transmission owners' rates are adjusted to collect/refund the revenue requirements falling outside the bandwidth. In that way, all transmission owners' rates reflect a movement towards an average, postage-stamp rate.

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Reactive Power Service, also known as Reactive Supply and Voltage Control from Generation Sources Service, is necessary to maintain transmission voltages

system-wide blackout.

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1		on the ISO transmission system within acceptable limits and requires that
2		generation facilities be operated to produce or absorb reactive power. This
3		service must be provided for each transaction on the ISO transmission system.
4		The amount of reactive power support that must be supplied for transactions is
5		based on the support necessary to maintain transmission voltages within limits
6		generally accepted and is consistently sustained in the region.
7		
8		Lastly, Scheduling, System Control and Dispatch Service ("Scheduling &
9		Dispatch Service") consists of the ISO services required to schedule at the ISO
10		level the movement of power through, out of, within, or into the ISO Control Area
11		over the PTF and to maintain System Control. Scheduling & Dispatch Service
12		also provides for the recovery of certain charges that reflect expenses incurred in
13		the operation of satellite dispatch centers.
14		
15	Q.	How are the ISO charges for Black Start, Reactive Power, and Scheduling &
16		Dispatch Services assessed to the Company?
17	A.	The ISO assesses charges for Black Start and Reactive Power Services to the
18		Company each month based on the Company's proportionate share of its network
19		load to ISO's total load. Exhibit SLH-1, Page 7 estimates the ISO rates for Black
20		Start and Reactive Power Services and the Company has applied the estimated
21		rates from Page 7 to the Company's loads to arrive at the estimated charges on
22		Page 8 (NEP Zone), Page 9 (Boston Edison Zone), and Page 10 (Northeast
23		Utilities Zone). Scheduling and Dispatching costs are assessed to the Company

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1		based on an annually determined rate, calculated in accordance with a FERC-
2		approved formula, multiplied by the Company's total network load.
3		
4	Q.	Are there any other applicable ISO charges which you have not mentioned
5		previously in this testimony?
6	A.	Yes. The ISO/RTO Tariff also charges for costs associated with Reliability Must
7		Run ("RMR") contracts.
8		
9	Q.	What are RMR contracts?
10	A.	RMR generation resources are those resources identified as necessary to maintain
11		the reliability of the ISO transmission system (e.g., to provide operating reserve
12		requirements and adherence to North American Electric Reliability Council,
13		Northeast Power Coordinating Council and ISO reliability criteria). For resources
14		that expect to be uneconomic and would otherwise seek authority to shut-down
15		permanently, a cost-of-service contract is implemented for monthly fixed-cost
16		compensation so that resource can remain available to serve reliability needs.
17		That contract is the RMR contract.
18		
19	Q.	How are these RMR contract costs allocated?
20	A.	Any monthly charges paid to RMR resources are allocated to the Network Loads
21		within the affected reliability region during that month.
22		
23	Q.	Is the Company subject to RMR costs?

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1	A.	Yes, the Company is subject to RMR costs associated with various RMR
2		contracts currently in effect for the different reliability regions in Massachusetts.
3		Attached as Exhibit SLH-2 is a copy of pages from the December 2, 2005
4		NEPOOL Committee Meeting which lists the various Reliability Agreements in
5		place in New England and their status as of that date.
6		
7	Q.	What services are provided to the Company under Section IV.A of the ISO/RTO
8		Tariff?
9	A.	The ISO provides three types of services under Section IV.A of its ISO/RTO
10		Tariff. These services include Scheduling & Dispatch Service, Energy
11		Administration Service ("EAS") and Reliability Administration Service ("RAS").
12		As mentioned previously, Scheduling & Dispatch Service is the service required
13		to schedule at the ISO level the movement of power through, out of, within, or
14		into the ISO Control Area over the PTF. For transmission service under the
15		ISO/RTO Tariff, scheduling service is an ancillary service that can only be
16		provided by the ISO. Thus, the ISO's charges for Scheduling & Dispatch Service
17		are based on the expenses incurred by the ISO in providing this service. EAS and
18		RAS are the services provided by the ISO to administer the Energy Market and
19		Reliability Market, respectively. In addition, Section IV.A of the ISO/RTO
20		Tariff, Schedule 4, provides for the collection of FERC Annual Charges. I have
21		included an estimated value for the FERC Annual Charges in this filing.
22		

Q.

23

How are the ISO/RTO Tariff charges assessed?

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The ISO assesses the charges in Section IV.A, excluding Schedule 4, based upon stated rates pursuant to the ISO/RTO Tariff. These stated rates are adjusted annually when the ISO files a revised budget and cost allocation proposal to become effective January 1<sup>st</sup> each year. The Company is charged the stated rate for these services as part of the ISO's monthly billing process, based on its network load for Schedule 1 charges and electrical load for Schedules 2 and 3 charges. Schedule 4 charges are based upon FERC's total assessment to the New England Control Area, and further assessed to NEP based on its proportion of total MWhs of transmission to the total of the New England Control Areas' total MWhs. NEP, in turn, allocates a portion of its total charges to the Company based on the Company's MWhs to NEP's total MWhs.

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#### В. **Explanation of Schedule 21 Tariff Services & Charges**

- What services are provided to the Company under Schedule 21 of the ISO/RTO 14 Q. Tariff?
- 16 A. Schedule 21 provides service over NEP's local, non-highway transmission facilities, considered non-PTF facilities ("Non-PTF"). The service provided over 17 18 the Non-PTF is referred to as Local Network Service ("LNS"). NEP also 19 provides metering, transformation and certain ancillary services to the Company 20 to the extent such services are required by the Company and not otherwise 21 provided under the ISO/RTO Tariff.

22

23

Q. Please explain the metering and transformation services provided by NEP.

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1	A.	NEP separately surcharges the appropriate customers for these services. NEP
2		provides metering service when a customer uses NEP-owned meter equipment to
3		measure the delivery of transmission service. NEP provides transformation
4		service when a customer uses NEP-owned transformation facilities to step down
5		voltages from 69 kV or greater to a distribution voltage.
6		
7	Q.	Are there any other charges NEP assesses to the Company?
8	A.	Yes. NEP also charges the Company for direct assignment facilities associated
9		with serving its load and supporting its transmission facilities, as described more
10		fully below.
11		
12		First, NEP has entered into transmission contracts with neighboring utilities in
13		order to provide transmission services solely for the benefit of the Company. For
14		example, in order to service customers in the Southern Berkshire area, NEP has
15		entered into contracts with Northeast Utilities for use of its transmission system in
16		order to bridge the gap between NEP's transmission facilities and the Company's
17		load in the Southern Berkshire area. These contracts reduce overall transmission
18		expenses by avoiding the need for NEP to build redundant transmission facilities
19		to serve the Southern Berkshire load. Any costs incurred by NEP under these
20		contracts are directly assigned to the Company.
21		
22		Second, NEP charges the Company for any generation-related expenses incurred
23		to support its transmission facilities. For example, NEP maintains diesel
24		generation units on the island of Nantucket to provide electric service to

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1		Nantucket's load in the event of a failure of the transmission facilities used to
2		serve the island from non-island generation, or the cable that connects the island
3		to the main transmission grid. Any costs associated with the maintenance of those
4		diesel generation units on Nantucket are directly assigned to the Company.
5		
6	IV.	Estimate of the Company's Transmission Expenses
7	Q.	Did you estimate the Company's transmission and ISO-NE expenses for the
8		period March 1, 2006 through February 28, 2007?
9	A.	Yes. Based on my knowledge of the ISO billing processes, I estimated the total
10		transmission and ISO expenses (including certain ancillary services) for 2006 to
11		be approximately \$175 million, as shown in Exhibit SLH-1, Page 1.
12		
13	Q.	How have the estimated 2006 RNS transmission charges been determined?
14	A.	As indicated in Exhibit SLH-1, Page 5, I have applied estimates of the RNS rates
15		and adjusted them to reflect (1) the NEPOOL Transition described earlier in my
16		testimony and (2) an estimated rate increase to the Post-96 PTF Rate to reflect a
17		forecast of capital expenditures for New England, as provided by the New
18		England transmission owners, that would be included in the annual formula rate
19		effective June 1st each year. The estimated 2006 RNS transmission charges to the
20		Company are then calculated by taking this forecasted RNS rate, divided by 12,
21		multiplied by the Company's monthly network load.
22		
23	Q.	How have the estimates for ISO Black Start, Reactive Power and Scheduling and
24		Dispatch Services been determined?

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1	A.	The estimated cost for Black Start Service is based on the July 2005 Black Start
2		level of 153,246 kW for 12 months multiplied by the January 1, 2006 rate of
3		\$4.50/kW-Yr. This estimate of \$8.28 million for the New England region for
4		Black Start Service, as shown in Exhibit SLH-1, Page 7, is divided by the ISO's
5		2005 Network Load to calculate an estimated annual rate. The monthly rate
6		(annual rate divided by 12) is then multiplied by the Company's monthly network
7		load to determine the estimated charges for Black Start Service.
8		
9		The estimated Reactive Power cost of \$115.4 million for the New England region
10		is calculated by using the actual costs for the period August 2004 through July
11		2005, as shown in Exhibit SLH-1, Page 3. The annual rate is determined by
12		dividing the total Reactive Power costs by the ISO's 2005 Network Load. The
13		monthly rate (annual rate divided by 12) is then multiplied by the Company's
14		monthly network load to determine the estimated charges for Reactive Power
15		Service.
16		
17		Finally, the Company's estimate for Scheduling and Dispatch Service is based on
18		the currently effective rate of \$0.96648, divided by 12, and further multiplied by
19		the Company's network load for the period August 2004 through July 2005.
20		
21	Q.	Have you included any RMR contract charges to the Company for 2006?
22	A.	Yes. As indicated previously in my testimony, the Company is subject to RMR
23		costs associated with various contracts currently in effect in the New England
24		region. Thus, I have annualized the actual expenses charged to the Company

2		period March 1, 2006 through February 28, 2007.
3		
4	Q.	How have the estimated charges to the Company under Schedule 21 of the
5		ISO/RTO Tariff been determined and how are these charges allocated to the
6		Company's customers?
7	A.	As shown in Exhibit SLH-1, Page 6, a base value for NEP's Non-PTF expenses
8		are increased by \$4.6 million to reflect the additional costs associated with
9		forecasted capital additions anticipated for the rate period. NEP allocates Non-
10		PTF expenses to the Company's customers on a load ratio share basis, as shown
11		in Exhibit SLH-1, Page 2. Metering, transformation and ancillary service charges
12		are based on current rates and are assessed to the Company based on a per meter
13		and peak load basis, respectively.
14		
15	Q.	How have the estimated 2006 ISO/RTO Tariff charges been determined?
16	A.	The ISO's charges to the Company are based on the ISO revenue requirement
17		filed each year with FERC. The ISO filed its proposed 2006 revenue requirement

from October 2004 through September 2005 to forecast the RMR expenses for the

Exhibit SLH-1, Page 4. This proportioning is intended to recognize the increase or decrease in the ISO's revenue requirement and the associated components of

with FERC on October 31, 2005. To estimate the Company's 2006 ISO charges,

the ISO's total, actual costs for the period August 2004 through July 2005 are

proportioned by the percent change in total year on year expenses, as shown in

that revenue requirement from the budget as filed for the previous year.

18

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1	Q.	Are there any further adjustments to the Company's forecasted transmission costs
2		for the year 2006?
3	A.	Yes. I have included an additional item in the forecast of the Company's
4		transmission costs associated with the Chester SVC and AC reinforcement
5		charges that were not included in the prior year's forecast. These costs were
6		inadvertently recorded to a generation-related account on NEP's books instead of
7		being recorded to a transmission-related account, as should have been the case.
8		Therefore, the prior year's transmission forecast would not have correctly
9		identified these costs as transmission since they were not recorded in a
10		transmission account. NEP will make an accounting adjustment to reclassify
11		actual costs incurred to date and reflect the adjustment on its transmission bill in
12		the same month.
13		
14	Q.	Does your estimate of the Company's 2006 expenses for transmission service and
15		ISO related services represent an increase or decrease from the level included in
16		the Company's current retail rates?
17	A.	The estimated 2006 transmission and ISO expenses of \$175 million represents a
18		net increase of \$25.9 million from the 2005 forecast of transmission expenses for
19		the Company. This net increase is primarily due to the PTF transmission plant
20		investment forecast for 2006 for all of New England (\$14.2 million) and the
21		proposed ISO charges for reactive power (\$12.4 million).
22		

V. <u>Explanation of Primary Changes from Last Year's Forecasted Expenses</u>

23

24

Q. What factors are driving the increase in the PTF expense forecast for 2006? S:\RADATA1\2006 meco\Annual Rate Filing\0306slh-testimony.doc

1	A.	The estimated \$14.2 million increase to the 2006 forecast of ISO PTF
2		transmission expenses is primarily due to an expected investment value of all
3		New England Transmission Owners of over \$850 million – the most significant of
4		which relate to: (1) the Northwest Vermont Reliability Project: \$120 million; (2)
5		NSTAR 345 kV Reliability Project: \$261 million; and (3) Southwest Connecticut
6		Reliability Project: \$411 million. Exhibit SLH-3 to my testimony is an excerpt
7		from the Regional System Plan 2005 approved by the ISO New England Board of
8		Directors, Section 8 – Transmission Projects which describes in more detail the
9		major projects itemized above. The complete version of the Regional System
10		Plan can be found at:
11 12		http://www.iso-ne.com/trans/rsp/2005/102005 RSP05 Final redacted.pdf
13	Q.	Please discuss the \$12.4 million increase in reactive power.
14	A.	The increase in reactive power is attributed to the fact that Boston area generators
15		were called upon by the ISO to supply VAR capability to Boston. Exhibit SLH-4
16		to my testimony provides a presentation to the ISO's Transmission Committee
17		from March 2005 that discusses the events that lead to the rise in VAR costs.
18		
19	Q.	You stated previously that the March 1, 2006 through February 28, 2007 forecast
20		of transmission expenses for the Company is \$25.9 million higher than the 2005
21		forecast of transmission expenses currently included in the Company's rates.
22		How did the 2005 forecast of transmission expenses for the Company compare to
23		the actual transmission expenses for the 12-month period ending September
24		2005?

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A. The 2005 forecast of transmission expenses to the Company was \$149 million.

Actual expenses for the 12-month period ending September 2005 were \$164

million, which is \$15 million more than that forecast. The majority of the

variance is the result of increases in reactive power costs (\$11 million).

5

## 6 VI. Conclusion

- 7 Q. Does this conclude your testimony?
- 8 A. Yes.

NATIONAL GRID

RE: Rate Changes for March 1, 2006 Witness: Susan L. Hodgson

## **Exhibits**

Exhibit SLH-1	Calculation of Transmission and ISO-NE Expenses for the period March 1, 2006 through February 28, 2007
Exhibit SLH-2	December 2, 2005 NEPOOL Committee Meeting: pp. 55-57, Reliability Agreement Status
Exhibit SLH-3	2005 Regional System Plan
Exhibit SLH-4	ISO's March 2005 Transmission Committee Presentation on Events Leading to Increased VAR Cost

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## Exhibit SLH-1

Calculation of Transmission and ISO-NE Expenses for the period March 1, 2006 through February 28, 2007

### National Grid: Massachusetts Electric Company National Grid: Nantucket Electric Company Summary of Transmission Expenses Estimated For the Period March 2006 through February 2007

### **NEP Charges**

	8		
1	Non-PTF	\$35,604,926	
2	Other NEP Charges	\$17,165,375	
	Sub-Total NEP Charges		\$52,770,301
	ISO Charges		
3	PTF	\$81,641,674	
4	Scheduling & Dispatch	\$3,677,171	
5	Reliability Must Run	\$8,647,442	
6	Black Start	\$1,529,487	
7	Reactive Power	\$21,348,958	
	Sub-Total ISO Charges		\$116,844,732
8	Schedule 1 - Scheduling & Dispatch	\$3,608,330	
9	Schedule 2 - Energy Administration	\$1,009,084	
10	Schedule 3 - Reliability Administration	<u>\$767,290</u>	
	Sub-Total ISO-NE Charges		\$5,384,704
11	Total Expenses:		\$174,999,736

Line 1 = Page 2, Column (2), Line 13

Line 2 = Page 2, Sum of Column (3) thru (7), Line 13 + Line 14

Line 3 = Page 3, Column (2), Line 13

Line 4 = Page 3, Column (3), Line 13

Line 5 = Page 3, Column (4), Line 13

Line 6 = Page 3, Column (5), Line 13

Line 7 = Page 3, Column (6), Line 13

Line 8 = Page 4, Column (1), Line 17

Line 9 = Page 4, Column (2), Line 17

Line 10 = Page 4, Column (3), Line 17

### National Grid: Massachusetts Electric Company National Grid: Nantucket Electric Company Summary of New England Power - Schedule No. 21 Charges Estimated For the Period March 2006 through February 2007

		(1) Non- PTF Load	(2) Non-PTF	(3)	(4) 3rd Party	(5) Generation in	(6)	(7)	(8)	(9)
		Ratio	Demand	Scheduling &	Support	Support of	Transformer	Meter	Chester	Total
		% Share	Charge	Dispatch	<u>Payments</u>	Transmission	Surcharge	Surcharge	SVC & AC	NEP Costs
1	January	67.50%	\$2,994,104	\$85,903	\$110,717	\$360,882	\$1,218,928	\$27,402	\$134,060	\$4,931,996
2	February	67.04%	\$2,973,812	\$191,516	\$75,807	\$357,902	\$1,218,928	\$27,402	\$133,152	\$4,978,519
3	March	67.26%	\$2,983,582	\$335,718	\$150,788	\$358,164	\$1,218,928	\$27,402	\$133,589	\$5,208,171
4	April	67.25%	\$2,982,827	\$145,252	\$128,028	\$360,120	\$1,218,928	\$27,402	\$133,555	\$4,996,112
5	May	67.48%	\$2,993,157	\$202,757	\$227,638	\$353,392	\$1,218,928	\$27,402	\$134,018	\$5,157,292
6	June	66.83%	\$2,964,371	\$168,238	\$46,854	\$67,987	\$1,218,928	\$27,402	\$132,729	\$4,626,509
7	July	66.79%	\$2,962,605	\$60,074	\$218,247	(\$7,100,285)	\$1,218,928	\$27,402	\$132,650	(\$2,480,379)
8	August	65.65%	\$2,912,067	\$51,960	\$22,453	\$91,668	\$1,218,928	\$27,402	\$130,387	\$4,454,865
9	September	66.21%	\$2,936,589	\$168,427	\$1,297,599	\$297,794	\$1,218,928	\$27,402	\$131,485	\$6,078,224
10	October	66.61%	\$2,954,398	\$81,385	\$128,605	\$356,756	\$1,218,928	\$27,402	\$132,283	\$4,899,757
11	November	66.61%	\$2,954,398	\$73,261	\$138,726	\$360,486	\$1,218,928	\$27,402	\$132,283	\$4,905,484
12	December	67.48%	\$2,993,016	\$163,829	<u>\$119,000</u>	<u>\$356,977</u>	\$1,218,928	<u>\$27,402</u>	<u>\$134,012</u>	\$5,013,164
13	12- Mo Total		\$35,604,926	\$1,728,320	\$2,664,462	(\$3,778,157)	\$14,627,136	\$328,824	\$1,594,204	\$52,769,715
14	FERC Assessm	ent								\$586

Lines 1-12: Column (1), (3) thru (5) = Monthly Network Bills for period August 2004 through July 2005

Lines 1-12: Column (6) & (7) = Current rate as of July 2005

Lines 1-12: Column (2) = Column (1) \* Page 6, Line  $16 \div 12$ 

Lines 1-12: Column (8) = Chester SVC Support Expense

Lines 1-12: Column (9) = Sum of Column (2) through (8)

Line 13 = Sum of Line 1 through Line 12

Line 14 = FERC Assessment

26-Jan-06

### National Grid: Massachusetts Electric Company National Grid: Nantucket Electric Company Summary of ISO Charges Estimated For the Period March 2006 through February 2007

		(1) Monthly <u>PTF kW Load</u>	(2) PTF Demand <u>Charge</u>	(3) Scheduling & Dispatch	(4) Reliability <u>Must Run</u>	(5) Black <u>Start</u>	(6) Reactive <u>Power</u>	(7) Total <u>ISO</u>
1	January	3,970,341	\$5,635,954	\$319,771	\$720,621	\$133,006	\$1,856,531	\$8,665,883
2	February	3,532,344	\$5,014,097	\$284,495	\$720,620	\$118,333	\$1,651,724	\$7,789,269
3	March	3,612,151	\$5,128,152	\$290,923	\$720,620	\$121,007	\$1,689,043	\$7,949,745
4	April	3,037,161	\$5,789,856	\$244,613	\$720,620	\$101,745	\$1,420,177	\$8,277,011
5	May	2,990,798	\$5,701,109	\$240,879	\$720,620	\$100,192	\$1,398,498	\$8,161,298
6	June	4,544,834	\$8,667,796	\$366,041	\$720,620	\$152,251	\$2,125,164	\$12,031,872
7	July	4,900,494	\$9,346,604	\$394,686	\$720,620	\$164,166	\$2,291,471	\$12,917,547
8	August	4,630,128	\$8,830,577	\$372,910	\$720,620	\$155,108	\$2,165,048	\$12,244,263
9	September	3,964,270	\$7,558,732	\$319,282	\$720,621	\$132,803	\$1,853,692	\$10,585,130
10	October	3,102,580	\$5,913,348	\$249,882	\$720,620	\$103,936	\$1,450,766	\$8,438,552
11	November	3,321,184	\$6,332,491	\$267,488	\$720,620	\$111,260	\$1,552,986	\$8,984,845
12	December	4,050,168	<u>\$7,722,958</u>	<u>\$326,201</u>	<u>\$720,620</u>	<u>\$135,680</u>	<u>\$1,893,858</u>	<u>\$10,799,317</u>
13	12-Mo Total	45,656,453	\$81,641,674	\$3,677,171	\$8,647,442	\$1,529,487	\$21,348,958	\$116,844,732

Line 1-12: Column (1) thru (6): Sum of Pages 8 through 10, Column (1) through (6)

Line 1-12: Column (7) = Sum of Columns (2) through (6)

26-Jan-06

### National Grid: Massachusetts Electric Company National Grid: Nantucket Electric Company Summary of ISO-NE - Tariff No. 1 Charges Estimated For the Period March 2006 through February 2007

		(1)	(2)	(3)	(4)
		Sch. 1	Sch. 2	Sch. 3	Total
		Scheduling	Energy	Reliability	ISO-NE
		& Dispatch	Administration	Administration	<u>Charges</u>
1	January	\$290,963	\$195,083	\$146,466	\$632,512
2	February	\$261,635	\$16,749	\$11,558	\$289,942
3	March	\$265,956	\$17,277	\$12,362	\$295,595
4	April	\$221,239	\$0	\$0	\$221,239
5	May	\$216,507	\$20,322	\$15,734	\$252,563
6	June	\$331,354	\$0	\$0	\$331,354
7	July	\$358,514	\$0	\$0	\$358,514
8	August	\$311,704	\$176,877	\$134,642	\$623,223
9	September	\$268,395	\$202,160	\$151,399	\$621,954
10	October	\$225,318	\$19,577	\$16,628	\$261,523
11	November	\$238,984	\$338,959	\$192,420	\$770,363
12	December	<u>\$295,591</u>	<u>\$184,676</u>	<u>\$124,216</u>	\$604,483
13	Sub-Total	\$3,286,160	\$1,171,680	\$805,425	
14	2005 Budget	\$19,074,765	\$75,523,753	\$29,283,747	\$123,882,265
15	2006 Budget	\$20,944,826	\$65,043,204	\$27,897,235	\$113,885,265
16	% Change	9.80%	-13.88%	-4.73%	
17	Estimate	\$3,608,330	\$1,009,084	\$767,290	\$5,384,704

Line 1-12: Column (1) thru (3) = Monthly ISO Bills for period August 2004 through July 2005

Line 13 = Sum of Line 1 through Line 12

Line 14 = ISO-NE Proposed Operating Budget (Year 2005)

Line 15 = ISO-NE Proposed Operating Budget (Year 2006) based on 10/31/05 FERC Filing

Line 16 = Line 15 - Line 14 ÷ Line 14

Line 17: Column (1) through (3) = Line 13 + (Line 13\*Line 16); Column (4) = Sum of Columns (1) through (3)

# New England Power Company PTF Rate Calculation Non-PTF Revenue Requirement Estimated For the Period March 2006 through February 2007

	Development of PTF Rate:		<u>NEP</u>	BECO	<u>NU</u>	
1 2	Currently Effective NEP PTF Rate Pre- Currently Effective NEPOOL PTF Rate Post-		\$11.85 \$5.02	\$13.43 \$5.02	+	/KW-YR /KW-YR
3	Total Regional Network Service Rate through Februa	ary 28, 2006	\$16.87	\$18.45	\$16.19	/KW-YR
	ESTIMATED Rate Effective March 1, 2006 through	May 31, 2006:				
4 5	Estimate Change in Rate - NEP PTF Rate Currently Effective NEPOOL PTF Rate Post-	* '	\$11.95 \$5.02	\$13.44 \$5.02		/KW-YR /KW-YR
6	Total Regional Network Service Rate March 1, 2006	6 through May 31, 2006	\$16.97	\$18.46	\$16.29	/KW-YR
	ESTIMATED Increase in NEPOOL Rate Effective Ju	une 1, 2006				
7	Total ESTIMATED NEPOOL Post-96 Plant Addition	ons	\$853,335,000	\$853,335,000	\$853,335,000	
8	* Post 96 Rev. Req. to Plant Ratio		14.1%	14.1%	14.1%	
9	/ 2004 NEPOOL Network Load		20,562,032	20,562,032	20,562,032	
10	Additional Estimated NEPOOL Post-96 Rate		\$5.85	\$5.85	\$5.85	/KW-YR
11 12	Pre-97 Rate Estimated Post-96 Rate		\$11.95 \$10.87	\$13.44 \$10.87		/KW-YR /KW-YR
13	Total Regional Network Service Rate in effect June 1	1, 2006 through February 28, 2007	\$22.82	\$24.31	\$22.14	/KW-YR

Line 1 & 2 = PTO Informational Filing dated 10/21/05

Line 3 = Line 1 + Line 2

Line 4 = Recalculation of RNS Rate using the change in bandwidth per Schedule 9 NEPOOL Tariff

Line 5 = PTO Informational Filing dated 10/21/05

Line 6 = Line 4 + Line 5

Line 7 = Total ISO 2006 Capital Additions Estimates as provided by Transmission Owners

Line 8 = Average ISO Post-96 Rev. Requirement to Plant Ratio - 2004

Line 9 = PTO Informational Filing dated 10/21/05

Line  $10 = \text{Line } 7 * \text{Line } 8 \div \text{Line } 9$ 

Line 11 = Line 4

Line 12 = Line 5 + Line 10

Line 13 = Line 11 + Line 12

26-Jan-06

### New England Power Company PTF Rate Calculation Non-PTF Revenue Requirement Estimated For the Period March 2006 through February 2007

Section II:		
14	NEP's Schedule 21 Non-PTF Revenue Requirement (12 mos. Ended 8/31/05)	\$48,642,737
15	Adjustment for Forecasted 2006 Capital Additions	\$4,584,433
16	Estimated 2006 Non-PTF Revenue Requirement	\$53,227,170
	Adjustment for Year End 2005 Capital Additions	
17	Estimated 2006 Non-PTF Transmission Capital Expenditures for Lines	\$7,752,000
18	Est. 2006 Non-PTF Transmission Capital Expenditures for Substations	\$25,310,100
19	Estimated Percentage Transferred to Plant in 2006 for Substations	70%
20	Estimated NEP 2006 Transmission Plant Additions	\$25,469,070
21	Non-PTF Transmission Plant Carrying Charge	18%
22	Adjustment for Forecasted 2006 Capital Additions	\$4,584,433
Section III:		
	Transmission Plant Carrying Charge	
23	NEP's Schedule 21 Revenue Requirement	\$48,642,737
24	Total Revenue Credit (12 Mos. Ended 7/31/05)	\$147,266,541
25	Total Transmission Integrated Facilities Credit (12 Mos. Ended 7/31/05)	<u>(\$35,452,697)</u>
26	Sub-Total	\$160,456,581
27	Total Transmission Plant (as of 7/31/05)	\$916,883,588
28	Non-PTF Transmission Plant Carrying Charge	18%

Line 14 = NEP Schedule 21 Billing

Line 15 = Line 22

Line 16 = Line 14 + Line 15

Lines 17 & 18 = Transmission Capital Budget \* 30% to estimate Non-PTF portion

Line 19 = Engineering Estimate for Substations

Line 20 = Line 17 + (Line 18 \* Line 19)

Line 21 = Line 28

Line 22 = Line 20 \* Line 21

Lines 23 through 25 = NEP Schedule 21 Billings

Line 26 = Sum of Lines 23 through 25

Line 27 = NEP Schedule 21 Billing

Line  $28 = \text{Line } 26 \div \text{Line } 27$ 

26-Jan-06

### National Grid: Massachusetts Electric Company National Grid: Nantucket Electric Company Summary of Reactive Power & Black Start Costs Estimated For the Period March 2006 through February 2007

### Section I: Development of Reactive Power Estimate

1 2	Estimated Total ISO Reactive Power Costs 2005 ISO Network Load (KW)	\$115,369,057 20,562,032
3	Estimated Rate / KW-Yr	\$5.6108
4	Estimated Rate / KW-Mo	\$0.4676

### Section II: Development of Black Start Costs

5	Estimated Total ISO Black Start Costs	\$8,275,306
6	2005 ISO Network Load (KW)	20,562,032
7	Estimated Rate / KW-Yr	\$0.4025
8	Estimated Rate / KW-Mo	\$0.0335

Line 1 = ISO-NE Schedule 2 Settlement Reports for period August 2004 through July 2005

Line 2 = 12 CP Network Loads from PTO Informational Filing dated 10/21/05

Line  $3 = \text{Line } 1 \div \text{Line } 2$ 

Line  $4 = \text{Line } 3 \div 12$ 

Line 5 = August 2005 Black Start Settlement Reports \* Current Rate of \$4.50 \* 12

Line 6 = Line 2

Line  $7 = \text{Line } 5 \div \text{Line } 6$ 

Line  $8 = \text{Line } 7 \div 12$ 

National Grid: Massachusetts Electric Company National Grid: Nantucket Electric Company Summary of ISO Charges Estimated For the Period March 2006 through February 2007

### **New England Power Load Zone**

		(1) Manadalar	(2)	(3)	(4)	(5)	(6)	(7)
		Monthly	PTF Demand	Scheduling	Reliability	Black	Reactive	Total
		PTF kW Load	<u>Charge</u>	& Dispatch	Must Run	<u>Start</u>	<u>Power</u>	<u>ISO</u>
1	January	3,630,655	\$5,133,671	\$292,413	\$658,967	\$121,627	\$1,697,694	\$7,904,372
2	February	3,237,580	\$4,577,871	\$260,755	\$660,486	\$108,459	\$1,513,892	\$7,121,463
3	March	3,306,986	\$4,676,009	\$266,345	\$659,740	\$110,784	\$1,546,347	\$7,259,225
4	April	2,808,037	\$5,339,424	\$226,159	\$666,256	\$94,069	\$1,313,038	\$7,638,946
5	May	2,773,750	\$5,274,228	\$223,398	\$668,323	\$92,921	\$1,297,006	\$7,555,876
6	June	4,186,701	\$7,960,925	\$337,197	\$663,835	\$140,254	\$1,957,701	\$11,059,912
7	July	4,497,686	\$8,552,256	\$362,244	\$661,387	\$150,672	\$2,103,118	\$11,829,677
8	August	4,252,641	\$8,086,308	\$342,508	\$661,869	\$142,463	\$1,988,535	\$11,221,683
9	September	3,660,860	\$6,961,049	\$294,846	\$665,467	\$122,639	\$1,711,818	\$9,755,819
10	October	2,876,050	\$5,468,749	\$231,637	\$668,005	\$96,348	\$1,344,841	\$7,809,580
11	November	3,055,937	\$5,810,801	\$246,125	\$663,068	\$102,374	\$1,428,956	\$8,251,324
12	December	3,709,738	\$7,053,990	<u>\$298,782</u>	<u>\$660,050</u>	<u>\$124,276</u>	\$1,734,673	\$9,871,771
13	12-Mo Total	41,996,621	\$74,895,281	\$3,382,408	\$7,957,453	\$1,406,886	\$19,637,619	\$107,279,647

Line 1-12: Column (1) = ISO Monthly Statement October 2004 - September 2005

Line 1-3: Column (2) = Page 5, Line 6 \* Column (1)  $\div$  12

Line 4-12: Column (2) = Page 5, Line 13 \* Column (1)  $\div$  12

Line 1-12: Column (3) = Current Rate \* Column (1)  $\div$  12 Rate = 0.96648 /kW-Yr

Line 1-12: Column (4) = Annualized Actual Costs ÷ 12

Line 1-12: Column (5) = Page 7, Line 8 \* Column (1)

Line 1-12: Column (6) = Page 7, Line 4 \* Column (1)

Line 1-12: Column (7) = Sum of Columns (2) through (6)

National Grid: Massachusetts Electric Company National Grid: Nantucket Electric Company Summary of ISO Charges Estimated For the Period March 2006 through February 2007

### **Boston Edison Load Zone**

		(1) Monthly <u>PTF kW Load</u>	(2) PTF Demand Charge	(3) Scheduling & Dispatch	(4) Reliability <u>Must Run</u>	(5) Black <u>Start</u>	(6) Reactive <u>Power</u>	(7) Total <u>NEPOOL</u>
1	January	227,799	\$350,402	\$18,347	\$41,346	\$7,631	\$106,519	\$524,245
2	February	199,709	\$307,194	\$16,085	\$40,742	\$6,690	\$93,384	\$464,095
3	March	209,659	\$322,499	\$16,886	\$41,827	\$7,024	\$98,037	\$486,273
4	April	153,299	\$310,539	\$12,347	\$36,373	\$5,136	\$71,683	\$436,078
5	May	146,268	\$296,296	\$11,780	\$35,243	\$4,900	\$68,395	\$416,614
6	June	255,223	\$517,007	\$20,556	\$40,468	\$8,550	\$119,342	\$705,923
7	July	283,184	\$573,648	\$22,808	\$41,642	\$9,487	\$132,417	\$780,002
8	August	264,579	\$535,960	\$21,309	\$41,178	\$8,863	\$123,717	\$731,027
9	September	209,714	\$424,819	\$16,890	\$38,122	\$7,025	\$98,062	\$584,918
10	October	147,502	\$298,796	\$11,880	\$34,260	\$4,941	\$68,972	\$418,849
11	November	178,821	\$362,239	\$14,402	\$38,800	\$5,991	\$83,617	\$505,049
12	December	226,222	<u>\$458,260</u>	\$18,220	\$40,250	<u>\$7,578</u>	\$105,781	<u>\$630,089</u>
13	12-Mo Total	2,501,979	\$4,757,659	\$201,509	\$470,251	\$83,816	\$1,169,926	\$6,683,161

Line 1-12: Column (1) = ISO Monthly Statement October 2004 - September 2005

Line 1-3: Column (2) = Page 5, Line 6 \* Column (1)  $\div$  12

Line 4-12: Column (2) = Page 5, Line  $13 * Column (1) \div 12$ 

Line 1-12: Column (3) = Current Rate \* Column (1)  $\div$  12 Rate = 0.96648 /kW-Yr

Line 1-12: Column (4) = Annualized Actual Costs ÷ 12

Line 1-12: Column (5) = Page 7, Line 8 \* Column (1)

Line 1-12: Column (6) = Page 7, Line 4 \* Column (1)

Line 1-12: Column (7) = Sum of Columns (2) through (6)

National Grid: Massachusetts Electric Company National Grid: Nantucket Electric Company Summary of ISO Charges Estimated For the Period March 2006 through February 2007

### **Northeast Utilities Load Zone**

		(1) Monthly PTF kW Load	(2) PTF Demand <u>Charge</u>	(3) Scheduling & Dispatch	(4) Reliability <u>Must Run</u>	(5) Black <u>Start</u>	(6) Reactive <u>Power</u>	(7) Total <u>NEPOOL</u>
1	January	111,887	\$151,881	\$9,011	\$20,308	\$3,748	\$52,318	\$237,266
2	February	95,055	\$129,032	\$7,656	\$19,392	\$3,184	\$44,448	\$203,712
3	March	95,506	\$129,644	\$7,692	\$19,053	\$3,199	\$44,659	\$204,247
4	April	75,825	\$139,893	\$6,107	\$17,991	\$2,540	\$35,456	\$201,987
5	May	70,780	\$130,585	\$5,701	\$17,054	\$2,371	\$33,097	\$188,808
6	June	102,910	\$189,864	\$8,288	\$16,317	\$3,447	\$48,121	\$266,037
7	July	119,624	\$220,700	\$9,635	\$17,591	\$4,007	\$55,936	\$307,869
8	August	112,908	\$208,309	\$9,094	\$17,573	\$3,782	\$52,796	\$291,554
9	September	93,696	\$172,864	\$7,546	\$17,032	\$3,139	\$43,812	\$244,393
10	October	79,028	\$145,803	\$6,365	\$18,355	\$2,647	\$36,953	\$210,123
11	November	86,426	\$159,451	\$6,961	\$18,752	\$2,895	\$40,413	\$228,472
12	December	<u>114,208</u>	<u>\$210,708</u>	\$9,198	\$20,320	<u>\$3,826</u>	\$53,404	<u>\$297,456</u>
13	12-Mo Total	1,157,853	\$1,988,734	\$93,253	\$219,738	\$38,785	\$541,413	\$2,881,923

Line 1-12: Column (1) = ISO Monthly Statement October 2004 - September 2005

Line 1-3: Column (2) = Page 5, Line  $6 * Column (1) \div 12$ 

Line 4-12: Column (2) = Page 5, Line 13 \* Column (1)  $\div$  12

Line 1-12: Column (3) = Current Rate \* Column (1)  $\div$  12 Rate = 0.96648 /kW-Yr

Line 1-12: Column (4) = Annualized Actual Costs ÷ 12

Line 1-12: Column (5) = Page 7, Line 8 \* Column (1)

Line 1-12: Column (6) = Page 7, Line 4 \* Column (1)

Line 1-12: Column (7) = Sum of Columns (2) through (6)

Witness: Susan L. Hodgson

## Exhibit SLH-2

December 2, 2005 NEPOOL Committee Meeting: pp. 55-57, Reliability Agreement Status

# Reliability Agreement Status

Unit	Annual Fixed Cost	Summer MW 2005 CELT	\$/kw-month <sup>(1)</sup>	Effective Date
Status: Effective with Final FERC App	roval			
Dominion Salem Harbor <sup>(2)</sup>	\$3,375,000	743	\$0.38	07/22/05
Exelon New Boston 1	\$30,000,000	350	\$7.14	01/01/02
NRG <sup>(3)</sup> Devon 11-14	\$16,568,124	121	\$11.45	01/17/04
NRG Devon 11-14 (Devon Settlement) <sup>(4)</sup>	\$3,000,000	121	\$2.07	01/17/04
NRG <sup>(3)</sup> Middletown 2-4, 10	\$49,617,744	770	\$5.37	01/17/04
NRG <sup>(3)</sup> Montville 5,6, 10&11	\$23,032,716	494	\$3.89	01/17/04
Status: Effective and in Hearings				
PSEG New Haven Harbor	\$47,368,806	448	\$8.81	11/18/05
PSEG Bridgeport Harbor 2	\$19,012,116	130	\$12.14	11/18/05
Status: Effective and in FERC Settlem	ent Proceeding			
Milford Power 1	\$40,824,787	239	\$14.23	11/03/04
Milford Power 2	\$40,797,848	254	\$13.41	11/03/04
Mirant Kendall <sup>(5)</sup> Steam 1	\$4,933,064	15	\$28.22	10/08/04
Mirant Kendall <sup>(5)</sup> Steam 2	\$5,964,958	21	\$23.67	10/08/04
Mirant Kendall <sup>(5)</sup> Jet 1	\$2,763,096	17	\$13.69	10/08/04
Bridgeport Energy	\$57,825,915	451	\$10.68	6/1/05
ConEdison West Springfield 3	\$8,292,690	101	\$6.83	5/1/05
Berkshire Power	\$30,199,855	230	\$10.96	7/1/05

<sup>(1)</sup> Does not reflect the netting of Market Revenues that are in excess of variable costs.

<sup>&</sup>lt;sup>(2)</sup> On 6/22/05, FERC approved the uncontested offer of settlement providing, among other things, for the collection of \$6.75 million in 24 equal monthly installments to commence within 45 days of FERC approval.

<sup>(3)</sup> On 11/1/05, NRG filed agreements to become effective when current agreements expire (see below).

<sup>(4)</sup> As part of Settlement, NRG had opportunity to recover \$3 million over period 10/1/04 through 10/1/05

<sup>(5)</sup> On 11/22/05, the Chief Adminstratrative Law Judge certified an offer of uncontested settlement with an annual fixed cost of \$7.92 million (including Steam 3) versus the current \$13.7 million.

# Reliability Agreement Status, Con't.

·	Annual Fixed	Summer MW		
<u>Unit</u>	Cost	2005 CELT	\$/kw-month <sup>(1)</sup>	Effective Date
Status: Filed at FERC Not Effective				
NRG - Devon, Middletown, Montville (2)	\$123,590,872	1385	\$7.44	Not Applicable
Status: Filed at FERC Rejected Witho	ut Prejudice			
Boston Generating Mystic 7	\$55,164,718	555	\$8.28	Not Applicable
Boston Generating Mystic 8 & 9	\$236,057,048	1398	\$14.07	Not Applicable
Status: Reliability Determination Give	en - No FERC Filin	g Yet		
Braintree - Potter 2	N/A	93	N/A	Not Applicable
Pittsfield Generating - Altresco	N/A	141	N/A	Not Applicable
Status: Reliability Determination Pen	ding			
Taunton - Cleary 8 & 9	N/A	131	N/A	Not Applicable
Con Ed - Woodland Road	N/A	16	N/A	Not Applicable
Con Ed - West Springfield-10	N/A	17	N/A	Not Applicable
Con Ed - West Springfield GT-1	N/A	38	N/A	Not Applicable
Con Ed - West Springfield GT-2	N/A	38	N/A	Not Applicable
Con Ed - Newington Energy, LLC	N/A	508	N/A	Not Applicable
Con Ed - Doreen	N/A	17	N/A	Not Applicable
Boston Generating - Fore River Edgar	N/A	668	N/A	Not Applicable
Lake Road 1-3	N/A	726	N/A	Not Applicable
Lowell Cogeneration <sup>(3)</sup>	N/A	25	N/A	Not Applicable
Calpine - Rumford Power	N/A	245	N/A	Not Applicable
Calpine - Androscoggin	N/A	128	N/A	Not Applicable
Calpine - Westbrook	N/A	514	N/A	Not Applicable
Granite Ridge	N/A	661	N/A	Not Applicable
Indeck Maine - W. Enfield <sup>(3)</sup>	N/A	21	N/A	Not Applicable
Indeck Maine - Indeck Jonesboro <sup>(3)</sup>	N/A	0	N/A	Not Applicable

<sup>(1)</sup> Does not reflect the netting of Market Revenues that are in excess of variable costs.

<sup>&</sup>lt;sup>(2</sup> Current agreements expire 12/31/05. ISO finding of continued need presented to Reliability Committee on 11/01/05. Filed on 11/1/05, requesting effective date of 1/1/06.

<sup>(3)</sup> Second request from Lowell Congen dated 10/24/05. Second request from Indeck dated 11/15/05.

# Reliability Agreement Status, Con't.

<u>Unit</u>	Annual Costs Prior to Termination	Summer MW 2005 CELT	\$/kw-month <sup>(1)</sup>	Termination Date
Status: Rejected by FERC, Remande	ed to FERC by Cour	t of Appeals		
PPL Wallingford 2-5 <sup>(2)</sup>	\$30,700,000	176	\$14.54	Not Applicable
Status: Terminated RMR Agreement	S			
NRG Devon 7 & 8	\$15,626,245	214	\$6.09	04/27/04
NRG Devon 7 alone	\$13,028,705	107	\$10.15	10/01/04
NRG Reliability Cost Tracker	\$30,000,000	1726	\$1.45	12/31/05 <sup>(3)</sup>
Status: Reliability Determination - No	ot Needed for Syste	em Reliability		
Lowell Power	N/A	0	N/A	Not Applicable
FPL Yarmouth 4	N/A	604	N/A	Not Applicable
Indeck Enfield	N/A	21	N/A	Not Applicable
Indeck Jonesboro	N/A	0	N/A	Not Applicable
Ridgewood	N/A	2	N/A	Not Applicable
Blackstone Tupperware	N/A	4	N/A	Not Applicable
Lowell Cogeneration	N/A	25	N/A	Not Applicable
Millennium Power	N/A	334	N/A	Not Applicable
Status: I.3.9 Applications Withdrawn	1			
Mirant Kendall - CT, Steam 1-3, Jet 1 <sup>(4)</sup>	N/A	226	N/A	Not Applicable
Status: I.3.9 - Application Granted				
Lowell Power <sup>(5)</sup>	N/A	0	N/A	Not Applicable

<sup>(1)</sup> Does not reflect the netting of Market Revenues that are in excess of variable costs.

For additional information, please go to: <a href="http://www.iso-ne.com/genrtion\_resrcs/reports/rmr/index.html">http://www.iso-ne.com/genrtion\_resrcs/reports/rmr/index.html</a>

<sup>&</sup>lt;sup>(2)</sup> Agreement rejected by FERC in early 2003. Remanded to FERC on 8/9/05. Requested effective date 2/1/03. PPL filed Petition on 11/29/05.

<sup>(3)</sup> Effectively terminated on 12/31/04 except for certain true-up provisions.

<sup>&</sup>lt;sup>(4)</sup> Mirant Kendall filed I.3.9 Applications dated 6/30/05. Applications withdrawn by e-mail on 8/23/05.

<sup>(5)</sup> Lowell Power retired on 7/1/05.

#### NATIONAL GRID

RE: Rate Changes for March 1, 2006

Witness: Susan L. Hodgson

### Exhibit SLH-3

2005 Regional System Plan

### **Section 8**

### **Transmission Projects**

Much progress has been made over the past few years regarding transmission projects. Seventy-five projects have been placed in service since RTEP01 totaling \$217 million in construction costs. Five of the region's six major 345 kV projects are in various stages of development, with state siting approval either completed or underway. Section 8 provides an update on the progress of the current major transmission efforts in New England and describes the needed transmission improvements to load or generation pockets.

### 8.1 Major Transmission Projects

This section summarizes the main features of the six major transmission projects in New England. They are considered major in terms of their potential specifications, costs, and how they will improve the transmission system; most involve new 345 kV transmission lines. The projects are as follows:

- Northeast Reliability Interconnect Project
- Northern New England Transmission Transfer Capability Project
- Northwest Vermont Reliability Project
- NSTAR 345 kV Transmission Reliability Project
- SWCT Reliability Project, Phase 1 and Phase 2
- Southern New England Reinforcement Project

### 8.1.1 Northeast Reliability Interconnect Project

The Northeast Reliability Interconnect Project, also known as the Second New Brunswick Tie Project, is proceeding. It is comprised of a new 144-mile, 345 kV transmission line connecting Le Preau Substation in New Brunswick to Orrington Substation in northern Maine along with supporting equipment. It is designed to increase transfer capability from New Brunswick to New England by 300 MW.

The ISO reviewed and approved the proposed plan in early 2003. The stakeholder transmission cost review, which was completed in mid-2004, determined that the \$90.4 million total U.S. cost of this project should be included in the regional transmission rate, which the ISO then approved. As is typical, the final actual cost of the constructed project may vary from the estimated cost and continues to be subject to review per the ISO tariff.

The project's application for a Certificate of Public Convenience and Necessity from the Maine Public Utility Commission (PUC) was approved in July 2005. The project is currently undergoing two other regulatory proceedings as follows:

- Application for an environmental permit from the Maine Department of Environmental Protection (DEP)
- Request for a Presidential Permit from the U.S. Department of Energy required for international tie lines

The planned in-service date for this project is the end of 2007.

### 8.1.2 Northern New England Transmission Transfer Capability Project

The ISO is conducting analyses to identify upgrades that will increase the transfer capabilities of the northern New England interfaces and reduce operational complexity by reducing the interdependencies of specific generators on the transfer capability. The Surowiec–South, Maine–New Hampshire, and northern

New England Scobie and 394 interfaces are most notably affected by these analyses. The ISO has identified alternatives, as follows, to address these issues, either individually or in combination:

- Closing the Y-138 line. This project, actively being pursued to address central New Hampshire reliability needs, also will provide some limited increase to the Surowiec–South and Maine–New Hampshire voltage and thermal limitations. This project is currently estimated to cost \$20 million. It is anticipated that the proposed project plan will be submitted for review in late 2005.
- Adding a 500–600 MVAR static compensator to provide dynamic voltage control at the Deerfield 345 kV Substation. This project would reduce the complexities and interdependencies of generators on the voltage limits of the Maine–New Hampshire interface and could also increase the Maine–New Hampshire and northern New England Scobie and 394 interface stability limitations. This potential alternative is currently estimated to cost \$25 million.
- Eliminating critical Buxton 345 kV contingencies resulting from the failure of key circuit breakers to operate. This project would increase the steady-state and stability limitations of the Surowiec–South and Maine–New Hampshire interfaces. This potential alternative is currently estimated to cost \$5 million.
- Looping Section 391 into the Deerfield 345 kV Substation. This project would reduce the complexities and interdependencies of the generators on the voltage limits of the Surowiec–South and Maine–New Hampshire interfaces. It could also increase the thermal and voltage limitations of the Surowiec–South and Maine–New Hampshire interfaces. This potential alternative is currently estimated to cost \$4 million.
- Upgrading 115 kV facilities near the southern Maine–New Hampshire border. This could increase Maine–New Hampshire thermal transfer limits during peak load or shoulder-peak load periods. This potential alternative is estimated to cost approximately \$4 million.
- Adding capacitor banks in western Maine and at Maxcy's. These additions could improve the Maine–New Hampshire voltage limits. This potential alternative is estimated to cost approximately \$6 million.

The ISO must evaluate these alternatives to determine which one to implement for addressing southern New England's reliability needs. The system changes associated with closing the Y-138 line and addressing southern New Hampshire's needs will improve the interface capabilities of the area. Once the ISO evaluates the base reliability upgrades, it can evaluate the critical interface capabilities. It also can more fully assess the incremental needs and benefits of the various other alternatives and produce recommendations regarding the alternatives most beneficial to pursue.

The ISO expects to complete these tasks in late 2005.

Eliminating constraints and improving technical performance on this transmission corridor will become increasingly important as the demand for capacity and resource diversity in the region increases in the very near future. While current system conditions might not suggest a need for a major system reinforcement, this may change in time. Analyses performed to assess future transmission adequacy may indicate further reliability needs within Maine and New Hampshire that, in aggregate with the region's needs or independently, may require additional and more significant transmission system reinforcements.

These longer-term analyses will continue into 2006.

### 8.1.3 Northwest Vermont Reliability Project

The Northwest Vermont Reliability Project is designed to improve reliability of the northwestern area of Vermont. The project is particularly needed to cover outages in this area that could cause voltage collapse. The project consists of a new 36-mile, 345 kV line, a new 28-mile, 115 kV line, additional phase-angle regulating transformers (PARs), two dynamic voltage-control devices, and static compensation. Prior to 2005, the ISO and NEPOOL reviewed the proposed plan and completed the transmission-cost allocation (TCA) for the project, initially estimated to cost \$156 million.

Two separate applications (Section 248) were filed with the Vermont Public Service Board (VPSB), one on May 23, 2003, for the Sandbar PAR, and a second one on June 5, 2003, for the balance of the project.82 This was done to expedite the Sandbar work in light of the unexpected failure of the PAR at Plattsburgh, New York, on April 11, 2003 (35 months after a prior failure), which the Sandbar PAR is meant to replace. The VPSB approved the Sandbar PAR application, and construction was completed on this project in 2004. A modified version of the second application was approved in early 2005. VELCO is presently reviewing the modifications, which included, among other changes, modifications to the design of a portion of both the 345 kV line and the 115 kV line. The original scheduled in-service dates of 2005, 2006, and 2007 for the various phases of the project may not be achievable, and cost impacts could lead to an amended transmission-cost application.83 Construction is now scheduled to begin in late 2005. If extreme weather conditions were to occur, combined with low generation availability and critical outages, local operator actions may be needed to maintain reliability.84

### 8.1.4 NSTAR 345 kV Transmission Reliability Project

The NSTAR 345 kV Project includes the construction of a Stoughton 345 kV station and the installation of three new underground 345 kV lines—two 17-mile cables to K Street Substation and one 11-mile cable to Hyde Park Substation. The project also includes adding new autotransformers at both Hyde Park and K Street Substations and shunt reactors at both Stoughton and K Street Substations. This \$234 million project will be constructed in two stages with a final in-service date of late 2007.

This project brings a new source of 345 kV supply to the Boston area from the south to address the reliability problems that emerged due to changing load and generation patterns. In addition to improving the reliability of the Boston-area transmission system, it also will increase the Boston-import transfer capability by approximately 1,000 MW.

In July 2004, the ISO completed its review and approval of the proposed plan for this project. The Massachusetts Energy Facilities Siting Board issued its approval of this project to NSTAR in December 2004. Construction of Phase 1 of the project began in April 2005; it is scheduled for completion in June 2006.

### 8.1.5 Southwest Connecticut Reliability Project

As discussed in previous RTEP reports, the transmission system in SWCT must be upgraded to remove operating constraints on existing generation, allow new generation to be installed, and improve the import capability of the area. Studies of the Southwest Connecticut region have been ongoing for several years.

<sup>82</sup> For information on Vermont Statute Section 248, see http://publicservice.vermont.gov/Lamoille/248statute.htm>.

<sup>83</sup> See Vermont Public Service Board Docket No. 6860.

<sup>84</sup> The loss of Highgate would compromise the reliability of the service to northern Vermont.

As reported in RTEP02, the Southwest Connecticut Reliability Project was to include a number of system reinforcements and an overhead (OH) 345 kV loop connecting existing 345 kV facilities in Middletown and Bethel. RTEP03 reconfirmed the need for the project in its entirety, but also indicated the likely need for some modifications due to local requirements. Ongoing studies have focused on alternative routings, alternative technologies, and significant technical performance issues raised by replacing sections of overhead line with underground cable.

In July 2003, the Connecticut Siting Council approved a combination overhead/underground (UG) alternative for the 20-mile Phase 1 project from Bethel to Norwalk. This modification required the development of a cost-effective acceptable design that could demonstrate the system would experience no significant adverse effects. The NEPOOL Reliability Committee found a number of relatively minor modifications to be necessary; it recommended approval of the proposed plan with the modifications in February 2004.

In April 2005, the CSC approved the construction of the approximately 70-mile Middletown to Norwalk section of the project (proposed and approved to include approximately 24 miles of UG cable). The addition of considerable high-capacitance cable into a relatively weak corner of the New England grid created the possibility for switching events to cause sustained temporary over-voltage conditions (due to harmonic resonances) that could significantly damage equipment.

After prolonged study, modifications were developed to mitigate the potentially harmful conditions and allow the project to continue. The modifications included changing the proposed cable technology and installing additional equipment and upgrades.

The current cost estimates for Phase 1 and Phase 2 of the SWCT Reliability Project are \$357 million and \$990 million, respectively. The ISO has reviewed and approved the proposed plan for Phase 1. Phase 1 substation construction is well underway, and work has begun on the 115 kV underground cable. Overall completion of the Phase 1 project still is scheduled for late 2006. Final supplementary studies to support the review of Phase 2's proposed plan began in the second quarter of 2005.

Areas within the Greater SWCT Subarea and NOR Subarea also face reliability problems due to inadequate 115 kV transmission. The preferred upgrades are a pair of new 115 kV lines from Norwalk to Glenbrook, developed as part of the SWCT Reliability Project. Studies are currently determining whether the construction of the Singer Substation and the reconnection of the Bridgeport Energy Center generator, elements of the Phase 2 project, can advance independently of Phase 1 tasks without there being any adverse system impacts. If so, this could somewhat mitigate area short-circuit current problems from hampering the interconnection of some generation in the area.

### 8.1.6 Southern New England Reliability Analysis

The ISO continues to study the southern New England region to identify and resolve reliability issues and to determine whether any interdependencies exist among these issues. An overall goal of the study is to formulate a solution that better integrates load-serving and generating facilities within Massachusetts, Rhode Island, and Connecticut, enhancing the grid's ability to move power from east to west and vice versa. Specific problems identified are as follows:

- The need for additional 345/115 kV-transformation capacity in Rhode Island
- Transmission constraints in Rhode Island, especially with transmission facilities out-of-service
- The inability of Rhode Island to access generation on the 345 kV system
- The criticality of the West Medway (MA) 345 kV station
- Forecasted capacity deficiencies in Connecticut

- Connecticut's limited import capability
- The limited effectiveness of the Lake Road plant to serve Connecticut load
- Connecticut's inadequate infrastructure to move power through the state
- The dependency of Connecticut import on Springfield–North Bloomfield capabilities
- Numerous contingency thermal overloads on the Springfield 115 kV system
- The dependency of the Springfield area on the Ludlow-Manchester-North Bloomfield 345 kV line

Ongoing studies are examining reinforcements for these key issues. The most practical alternatives to simultaneously improve the SEMA/RI, East-West, and Connecticut-import interface capabilities also appear to be 345 kV reinforcements. The studies to examine these alternatives are considering line loading, voltage, stability, and torsional-reclosing issues.

Different options for system reinforcement are being explored, based on available rights-of-way, space constraints at existing substations, and specific locations where area-supply reinforcements are needed.

As is typical, an overriding goal of the analyses is to determine the minimum set of projects that could provide the maximum benefits or solutions to the problems uncovered. The analyses could find some problems to be totally independent of the major issues facing the Greater Southern New England system that would, therefore, require an independent project. However, the studies may also indicate many issues could be remedied through a common project or group of projects.

Not all of the alternatives first formulated are still being considered because they have been deemed to be impractical or infeasible or due to their failure to sufficiently improve the transfer capability into Connecticut. The alternatives (in whole or in part) still being considered are listed below:

- Sherman Road or West Farnum (RI)–Lake Road (CT)–Card (CT) 345 kV
- Sherman Road or West Farnum-Kent County (RI)-Montville (CT) 345 kV
- Brayton Point (RI)–Montville 345 kV
- Millbury (MA)–Carpenter Hill (western MA)–Manchester (CT) 345 kV
- Millbury-Carpenter Hill-Ludlow-Agawam (western MA)-North Bloomfield (CT) 345 kV

Similarly, the options considered for improving load service into Rhode Island and to best integrate the generation connected to the 345 kV network include the following projects in whole or in part:

- Millbury-Sherman Road-Lake Road (CT)-Card (CT) 345 kV
- Millbury-West Farnum-Lake Road-Card 345 kV
- Millbury–West Farnum–Kent County–Montville 345 kV
- Brayton Point-Manchester Street (RI)-Kent County-Montville 345 kV
- 345/115 kV autotransformers at 345 kV substations in Rhode Island

The report of the study work is scheduled to be completed by the end of 2005, leading to an ISO-approval of a project plan by July 2006. The projected in-service date for the final set of solutions is 2011.

### 8.2 Transmission Improvements to Load/Generation Pockets

Various areas of the system are highly dependent on imbedded generators operating to maintain reliability in smaller areas of the system. Reliability may be threatened when few generating units are available to provide system support, considering normal levels of unplanned or scheduled outages of generators or transmission facilities. These generators have been designated as daily second-contingency units, which may be needed on a regular basis to maintain the reliable operation of these smaller areas to avoid

violating ISO New England operating criteria. This could mean maintaining voltage at the minimum levels or avoiding overloads per OP 19. This local-area dependency on generating units typically results in relatively high net compensation period costs associated with out-of-merit unit commitments.

The ISO is studying many of these areas. Transmission projects are being planned for some areas, while others already have projects under construction to mitigate dependency on the imbedded generating units.

The sections that follow describe several of the smaller areas that have units for maintaining reliability and transmission projects for reducing the need to run these units.

#### 8.2.1 Middletown Area

Four 115 kV lines and three generators connected to the 115 kV system—Middletown #2 (117 MW), Middletown #3 (236 MW), and Middletown #10 (17 MW)—supply the Middletown, Connecticut, area. Unit #10, 38 years old, is the newest of these units. Middletown #4 (400 MW) is connected to the 345 kV without transformation to the 115 kV system, so it does not support the local load in the area.

ISO Operations has flagged Middletown Units #2, #3, and #4 as daily second-contingency units that provide critical voltage support to the local 115 kV area. These units help avoid low voltages that would result from single- or double-circuit outages in the area. Since suppliers have not offered the electricity market alternative resources in this area to relieve the operation of these units, the ISO has studied alternative transmission solutions. The most effective solution for providing for future load growth, reducing dependency on the operation of these Middletown units, and potentially allowing the future retirement of the units was found to be a new 345/115 kV autotransformer located at Haddam Substation along with other area improvements. The ISO has reviewed and approved the proposed plan for these projects, which are discussed in more detail in Appendix C.

#### 8.2.2 Norwalk-Stamford Area

The Norwalk–Stamford, Connecticut, area has been highly dependent on area generation to maintain reliable operation for general operation and maintenance of the 115 kV system. This area is part of the Greater SWCT area. This generation is comprised of Norwalk Harbor Units #1 (162 MW), #2 (172 MW), and #10 (17), and Cos Cob Units #10, #11, and #12 (18 MW each).

The two Norwalk Harbor units have been designated as daily second-contingency units for the current year. The planned SWCT 345 kV Reliability Project Phase 1 will provide for load growth, reduce dependency on the operation of these local units, and may eventually allow the retirement of these units.

#### 8.2.3 Southwest Connecticut Area

For the current year, the ISO has designated 14 units in the SWCT area, excluding the Norwalk—Stamford area, for daily second contingency. These units are Bridgeport Energy, Bridgeport Harbor #2 and #3, Devon #11 to #14, Milford #1 and #2, and Wallingford #1 to #5. These units must operate due to the limitations of the transmission system in SWCT. The capacity deficiency in this area and the weakness of the existing transmission system have been the basis for the SWCT Reliability Project, Phase 2, which will help reduce the dependency on these units. Emergency measures, such as those included in the SWCT RFP for Emergency Capability Resources, can provide some relief during emergency OP 4 conditions until the Phase 2 project is built, but these are only temporary measures.85 Phase 2 (along with Phase 1) will also allow the interconnection of new generation in this area. Other transmission solutions were examined in the process of deciding on the current 345 kV project.

### 8.2.4 Springfield Area

National Grid Docket DTE \_\_\_\_ Exhibit SLH-3 Page 7 of 7

The Springfield area has two generators, West Springfield #3 and Berkshire Power, which have been designated as daily second contingency for the current year. Their operation is needed to support local reliability during peak hours for avoiding overloads in violation of OP 19. Electricity market suppliers have not proposed alternative resources in this area to relieve the operation of these units. Studies of alternative transmission solutions are underway for the Greater Springfield area. The ultimate solutions will provide for load growth and reduce dependency on the operation of these local units. They also may allow for the eventual retirement of the units.

#### 8.2.5 Boston Area

The Boston area has several units designated as daily second contingency for the current year. New Boston #1 is needed for local reliability support for the Boston downtown area along with Mystic Units #7, #8, and #9. In the absence of any sufficient resource proposals from electric market suppliers for this area, the NSTAR 345 kV Reliability Project has been developed to serve future load growth and improve the reliability of this area. When completed, the project will allow New Boston Unit #1 to retire.

85 Resources were selected for SWCT in response to the RFP issued by ISO, December 1, 2003.

Witness: Susan L. Hodgson

### Exhibit SLH-4

ISO's March 2005 Transmission Committee Presentation on Events Leading to Increased VAR Cost



### Boston Area Voltage Issues

Review of Recent and Planned NSTAR System Modifications and Changes to Boston Area Guide 3/1/05

C.P.Salamone



### Boston Area High Voltage Concerns

- Boston area has over 1000 MVAR of charging currents from area cable circuits plus charging from overhead lines
- Boston light load levels of 1800 MW at .96 PF places only 525 MVAR of reactive load on the system
- Absent reactive compensation voltages could exceed 1.07 per unit, risking equipment damage



### Boston Area Reactive Compensation

- OP17 Load Power Factor requirements are at .9 PF for light load conditions
- Seven 115 kV, 80 MVAR Reactors (560 MVAR) are in service in the Boston area
  - One reactor was out during Spring 2004 due to a disconnect switch failure
- Woburn LTC placed in service in Fall 2004
  - Helps 115 kV reactors lower 345 kV voltage
- While total generator leading reactive capability is 600 MVAR, units are typically not economic at light load



# Boston Area Operation Procedures

- Prior Practices
  - Dispatch 115 kV reactors as needed
  - Switch out 345 kV cables as needed
    - Cable switching increased significantly in 2003
  - Dispatch generation based strictly on ranges of light load levels

- Revised Practice
  - Point system implemented to account for all reactive resources
    - Reactors
    - Woburn LTC
    - Generators
    - Cable openings
  - Total point req'ts defined for ranges of light load levels

Area planned/operated to sustain loss of most critical reactive resource (n-1). Cable switching relied on for n-2 contingency protection.



### Boston Area Voltage Management

- Point system sets values for each reactive resource:
- *Example* Assignments
  - Each reactor 3 points,
  - LTC 2 pt,
  - Each generator 4 pt
  - Each cable 3 pt

### • Example Case

- Lowest overnight load level expected 10,500 for NE, 27 pts required
- Mystic 8 on based on economic dispatch = 4 pt
- All 115 kV reactors on = 21 pt
- Woburn LTC available = 2 pt
- Sandy Pond Exporting = 0 pt
- Total points dispatched = 27 pt (meets requirements)



### Impact of New Point System

- Assuming typical full availability of reactors and availability of the Woburn LTC, in general, one less unit will be required at light load levels.
- While some conditions may suggest possible area operation with no units, detailed System Planning study required first.



### North Cambridge Reactor

- New 345 kV 160 MVAR Reactor due to be installed by May 2005
  - Directly controls 345 kV voltage
  - Variable compensation from 70 MVAR to 160 MVAR in 2.5 MVAR steps
  - Studies indicate that for 9,400 MW NE load level all generation could theoretically be off and voltages would be acceptable under normal and contingency conditions (assumes use of cable switching for contingencies)
  - Again, practical considerations of this operating condition are being studied further in System Planning studies

MASSACHUSETTS ELECTRIC COMPANY
NANTUCKET ELECTRIC COMPANY
d/b/a NATIONAL GRID
Docket No. D.T.E. 06-\_\_\_
Witness: McCabe

### **DIRECT TESTIMONY**

**OF** 

**SCOTT M. MCCABE** 

### MASSACHUSETTS ELECTRIC COMPANY NANTUCKET ELECTRIC COMPANY d/b/a NATIONAL GRID Docket No. D.T.E. 06-\_\_\_

Witness: McCabe

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1	I.	Introduction and Qualifications
2	Q.	Please state your full name and business address.
3	A.	My name is Scott M. McCabe and my business address is 55 Bearfoot Road,
4		Northborough, Massachusetts 01532.
5		
6	Q.	Please state your position.
7	A.	I am Senior Analyst, Distribution Regulatory Services for National Grid USA Service
8		Company, Inc. The Distribution Regulatory Services Department performs rate-related
9		services for companies of National Grid USA, including Massachusetts Electric
10		Company and Nantucket Electric Company, together d/b/a National Grid (together "the
11		Company").
12		
13	Q.	Please describe your educational background and training.
14	A.	I graduated from Bowdoin College in Brunswick, Maine with a Bachelor of Arts degree
15		in Economics and Government and Legal Studies in 1991.
16		
17	Q.	Please describe your professional experience.
18	A.	From 1991 to 1999, I was employed by Bay State Gas Company ("Bay State Gas"),
19		headquartered in Westborough, MA. At Bay State Gas I held several positions,
20		beginning as an intern for the Marketing and Sales Group in September 1991 and
21		promoted to Associate Planning Analyst for the same group in January 1993. In August
22		1993, I joined the Demand Side Management ("DSM") department as a program
23		manager responsible for the implementation of Bay State Gas's commercial and

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1		multifamily DSM Programs. In August 1996, I joined EnergyUSA, an unregulated
2		affiliate of Bay State Gas, as a Senior Financial Analyst and in December 1997 was
3		promoted to Manager of Product Support. In January 1999 I rejoined Bay State Gas as
4		Revenue Control and Analysis Supervisor. From May 1999 through April 2001, I
5		worked for the Massachusetts Technology Collaborative as Project Manager for the
6		Massachusetts Renewable Energy Trust. I joined National Grid USA in April 2001 as
7		Senior Analyst in the Energy Efficiency Services Group. In October 2002 I transferred
8		to my current position in Distribution Regulatory Services.
9		
10	Q.	Have you previously testified before the Department of Telecommunications and Energy
11		("the Department")?
12	A.	Yes I have.
13		
14	II.	Purpose of Testimony
15	Q.	What is the purpose of your testimony?
16	A.	My testimony presents the derivation of the Company's proposed adjustment to its
17		distribution rates to take effect in March 2006 in accordance with the provisions of the
18		Rate Plan Settlement approved by the Department in the NEES/EUA merger Docket No.
19		D.T.E. 99-47 (the "Rate Plan Settlement"), under which it is currently operating. Under
20		this mechanism, the Company is proposing an increase to its distribution rates of 4.05%,
21		as shown on Line (6) of in Exhibit SMM-1.
22		

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1	A.	Of course. The Rate Plan Settlement dictates what will affect the Company's distribution
2		rates during the period March 1, 2005 through December 31, 2009 (the "Rate Index
3		Period"). Pursuant to §I.C.3 and Attachment 8 of the Rate Plan Settlement, the
4		Company's distribution rates shall be adjusted during the Rate Index Period based upon
5		changes in the average distribution rate ("Regional Average Rate") of a group of
6		investor-owned electric utilities in New England, New York, New Jersey and
7		Pennsylvania (New England, New York, New Jersey, and Pennsylvania together are the
8		"Region"). This adjustment is called the Regional Index.
9		
10	Q.	What is the Regional Index?
11	A.	The Regional Index is a mechanism by which the Company addresses cost increases or
12		decreases that are being experienced by other utilities in the region. The Regional Index
13		allows the Company's distribution rates to change as the costs of the other utilities in the
14		Region are reflected in the rates of those utilities.
15		
16		The Regional Index was initially determined based on rates in effect July 1, 2004 for
17		those investor-owned utilities in the Region that have similarly unbundled distribution
18		rates as compared to those of Massachusetts' investor-owned electric utilities. The
19		Company's initial position could not exceed ninety (90) percent of the Regional Index.
20		Subsequent to the initial calibration, the Company's distribution rates are to adjust
21		annually based upon the annual change of the Regional Index.
22		

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A.	No. Utilities with bundled rates at the time the Rate Plan Settlement was executed were
	excluded from the illustrative calculation contained in Attachment 8 to the Rate Plan
	Settlement. However, the Rate Plan Settlement contemplated that utilities would
	continue to unbundle their rates after the Rate Plan Settlement was signed on November
	29, 1999, and requires the Company to include any utilities who have unbundled their
	delivery tariffs as of July 1, 2004 in the calculation of prospective adjustments to the
	Regional Index. By including more utilities, the Regional Index provides a better
	indication of the underlying costs and issues that are affecting distribution rates for
	electric utilities in the Region and limits the effects that are associated with an action by
	any single utility in the Regional Index.

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9

- Q. Are there any other directives in the Rate Plan Settlement that guide the Company on the method to follow under the Regional Index?
- 14 A. Yes. According to Section I.C.3.b of the Rate Plan Settlement, the Company "shall calculate the Regional Index as of July 1 of each year from 2005 through 2008 and shall 15 use the calculation to adjust Mass. Electric's distribution rates (as) set forth in 16 Attachment 9. Under that methodology, Mass. Electric shall calculate a rate adjustment 17 by multiplying its index times the Regional Average distribution rates in July of each 18 calendar year from 2005 through 2008." This formula is illustrated in Attachment 9 of 19 the Rate Plan Settlement and presented in Exhibit SMM-1 to determine the percentage 20 adjustment to the Company's distribution rates for March 2006. 21

### MASSACHUSETTS ELECTRIC COMPANY NANTUCKET ELECTRIC COMPANY d/b/a NATIONAL GRID Docket No. D.T.E. 06-\_\_\_

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III. Initial Calibration of the Regional Index as of July 1, 20	III.	Initial	Calibration	of the R	egional	Index as	of July 1	. 2004
---	------	---------	-------------	----------	---------	----------	-----------	--------

2	Q.	Did the Company determine the initial calibration of its average distribution rate per kWh
3		relative to the 2004 Regional Average Rate per kWh as of July 1, 2004 ("Initial
4		Calibration")?
5	A.	Yes. The calculation of the Initial Calibration of the Company's position relative to the
6		Regional Index is presented in Exhibit SMM-2. The Company's average distribution rate
7		is 2.542¢ per kWh. The 2004 Regional Average Rate is 2.899¢ per kWh. The initial
8		position of the Company's average distribution rate relative to the 2004 Regional
9		Average Rate is 87.7%. As required by the Rate Plan Settlement, the Company's initial
10		relative position did not exceed 90% of the 2004 Regional Average Rate. The
11		Company's initial relative position in the Initial Calibration was important because, as set
12		forth in footnote 6 in the Rate Plan Settlement, the 90% threshold was a cap to the Initial
13		Calibration, and determined how much of the \$10 million settlement credit could be
14		terminated effective March 2005. Subsequent to the Initial Calibration, the Company's
15		distribution rates are to adjust annually through the Rate Index Period based upon the
16		annual change of the Regional Index.
17		
18	Q.	Has the Company previously filed the Initial Calibration with the Department?
19	A.	Yes. The Company formally filed its Initial Calibration on July 13, 2005. The filing
20		showed the Company's initial position compared to the 2004 Regional Average Rate was
21		87.1%.

 $<sup>^1</sup>$  The July 13, 2005 filing was a corrected version of a filing made on June 17, 2005. In early 2005, the Company had provided a calculation in response to a data request in Docket No. D.T.E. 05-2. The July 13, 2005 filing S:|RADATA1|2006 meco|Regional Index|Annual Rate Filing|0306smm-testimony.doc

### MASSACHUSETTS ELECTRIC COMPANY NANTUCKET ELECTRIC COMPANY d/b/a NATIONAL GRID Docket No. D.T.E. 06-\_\_\_

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- 1 Q. Has the Company made adjustments to the Initial Calibration?
- 2 A. Yes.

- 4 Q. Please describe the adjustments that the Company has made to the Initial Calibration since the July 13, 2005 submission?
- In reviewing the calculation of the 2004 Regional Average Rate, the Company has made A. 6 some additional adjustments to improve the accuracy of the Regional Index. First, in 7 instances in which the calculation of the bill under a comparable rate schedule to that of 8 the Company's General Service Rate G-1 includes a demand charge, the Company 9 originally carried the demand value out to two decimal places (for example 5.93 kW for 10 11 the average Rate G-1 customer). However, when the Company determines billing demand, it does so out to one decimal place (for example 5.9 kW). To reflect how it 12 13 determines and bills demand charges, the Company revised the demand value to the 14 single decimal place, or 5.9 kW, for the average Rate G-1 customer. This change affected ten of the twenty-six utilities in the 2004 Regional Average Rate. A similar 15 adjustment was not necessary for bills calculated that were comparable to the average 16 customer receiving delivery service under General Service Demand Rate G-2 and 17 General Service Time-of-Use Rate G-3 because the Company always reflected the 18 average billing demand for these two rate schedules out to one decimal place. In 19 addition, based on further review of the rate schedules and discussions with 20 representatives of some of the utilities, the Company revised the applicable rate 21

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1		schedules used in four of the 104 utility-specific bill calculations to better match how the
2		Company's average customer would receive service by those utilities. Also, the
3		Company corrected some of the actual calculations which ranged from rounding errors to
4		a typographical error in the entry of a rate. Finally, the Company made adjustments to
5		either include or remove certain charges and/or riders to more accurately reflect the types
6		of cost recovery inherent in these charges and/or riders and their comparability to the
7		types of costs being recovered by the Company's distribution rates.
8		
9	Q.	What is the effect of these adjustments on the Initial Calibration?
10	A.	The net result was a slight decrease to the 2004 Regional Average Rate from 2.918¢ per
11		kWh to 2.899¢ per kWh and moved the Company's initial relative position to the 2004
12		Regional Average Rate from 87.1% to 87.7%. While this moved the Company slightly
13		closer to the 90% threshold, the Company's initial relative position still remains below
14		the required 90%.
15		
16	IV.	Calculation of Regional Index as of July 1, 2005
17	Q.	Has the Company calculated the Regional Index as of July 1, 2005 ("2005 Regional
18		Average Rate")?
19	A.	Yes. The calculation of the 2005 Regional Average Rate is presented in Exhibit SMM-3.
20		The 2005 Regional Average Rate is 3.017¢ per kWh, leading to a Regional Index
21		proposed adjustment to the Company's distribution rates of 4.05% effective March 2006.
22		Pursuant to Section I.C.3.c of the Rate Plan Settlement, this equal percentage adjustment
23		is applied to all rate classes and all rate design elements of the Company's distribution

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1		rates, and the calculation of the proposed distribution rates is contained in the testimony
2		and exhibits of Theresa M. Burns as Exhibit TMB-18 of this filing.
3		
4	Q.	Did the Company use the same assumptions in the calculation of the 2005 Regional
5		Average Rate as it did in the calculation of the 2004 Regional Average Rate?
6	A.	Yes. The assumptions used in the calculation of the 2004 Regional Average Rate and the
7		2005 Regional Average Rate are identical. The same twenty-six utilities are included in
8		both calculations. In addition, the same 104 rate schedules representing the 104 bill
9		calculations are also reflected in both years.
10		
11	Q.	Have there been any changes to the utilities' rate structures in the region from July 1,
12		2004 to July 1, 2005?
13	A.	There have been changes to two utilities in the region during the period July 1 2004
14		through July 1, 2005. The first involves Public Service Company of New Hampshire
15		("PSNH"). PSNH implemented unbundled distribution rates on April 1, 2005. In its next
16		filing to adjust distribution rates effective March 2007, the Company will include PSNH
17		in the calculation of the Regional Index as of July 1, 2006. In addition, in order to
18		determine the appropriate level of the distribution rate adjustment percentage (a utility
19		should be reflected in the Regional Average Rate for two years in order to derive the
20		year-on-year change in the index), the Company has "normalized" the 2005 Regional

Average Rate by including PSNH and recalculating the 2005 Regional Average Rate that

will be used next year. This normalized 2005 Regional Average Rate is presented in

Exhibit SMM-4. Next year, to determine the percentage change the Company will

21

22

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1		propose to its distribution rates, the Company will compare the normalized 2005
2		Regional Average Rate contained in Exhibit SMM-4 to the 2006 Regional Average Rate,
3		and the percentage change in the Regional Average Rate will be used to adjust the
4		Company's distribution rates in March 2007.
5		
6		The second change involves Consolidated Edison ("Con Ed"). Con Ed rebundled its
7		transmission and distribution rates effective April 1, 2005 as part of a rate case. Because
8		Con Ed was unbundled on July 1, 2004, its distribution rates are included in the Initial
9		Calibration. The Company has continued to include Con Ed in the 2005 Regional
10		Average Rate. This approach maintains consistency between the Initial Calibration and
11		the 2005 Regional Average Rate, and continues to include all of the information used to
12		set the Initial Calibration in the annual adjustments under the Regional Index.
13		
14	Q.	How did the Company separate Con Ed's combined transmission and distribution rates
15		for the purposes of including distribution rates in the 2005 Regional Average Rate?
16	A.	To isolate the distribution component contained in Con Ed's rates, the Company
17		separated the bundled transmission and distribution rates between the transmission and
18		distribution functions based on the ratio of Con Ed's July 1, 2004 unbundled distribution
19		rates to the sum of its July 1, 2004 unbundled distribution and transmission rates for each
20		rate class. This calculation is presented in Exhibit SMM-5. For example, the July 1,
21		2004 distribution rate under Con Ed's residential rate schedule was about 85% of the sum
22		of the transmission and distribution rates under that rate schedule. Therefore, the
23		Company applied that percentage to Con Ed's July 1, 2005 bundled residential

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1		transmission and distribution rate to derive the distribution rate to include in the index.
2		On that basis, approximately 15% of Con Ed's bundled transmission and distribution
3		rates as of July 1, 2005 was excluded to arrive at the distribution rates used in the 2005
4		Regional Average Rate calculation.
5		
6	V.	Conclusion
7	Q.	Does this conclude your testimony?
8	Α.	Yes, it does.

# MASSACHUSETTS ELECTRIC COMPANY NANTUCKET ELECTRIC COMPANY d/b/a NATIONAL GRID Docket No. D.T.E. 06-\_\_\_ Witness: McCabe

### **Exhibits**

Exhibit SMM-1	Calculation of Adjustment to Distribution Rates
Exhibit SMM-2	Initial Calibration of Distribution Rates to Regional Index – July 1, 2004
Exhibit SMM-3	July 1, 2005 Regional Index
Exhibit SMM-4	Normalized July 1, 2005 Regional Index
Exhibit SMM-5	Allocation of Consolidated Edison Delivery Rate Between Distribution
	and Transmission

MASSACHUSETTS ELECTRIC COMPANY
NANTUCKET ELECTRIC COMPANY
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### **Exhibit SMM-1 Calculation of Adjustment to Distribution Rates**

01/26/2005

MASSACHUSETTS ELECTRIC COMPANY NANTUCKET ELECTRIC COMPANY d/b/a NATIONAL GRID Docket No. D.T.E. 06-\_\_\_ Exhibit SMM-1 Page 1 of 1

### Massachusetts Electric Company Nantucket Electric Company Calculation of Adjustment to Distribution Rates

		Methodology	
(1)	Massachusetts Electric's Percentage of the Regional Index Determined as of July 2004, Normalized for New Entrants into the Index	87.7%	
(2)	Regional Index as of July of the Year Prior to Filing, Applied to Massachusetts Electric's Average Customer Deliveries Fixed As of July 2004	\$0.03017	per kWh
(3)	Massachusetts Electric's Index Distribution Rate as of July for the Subsequent Calendar Year (July 2005)	\$0.02645	per kWh
(4)	Massachusetts Electric's Average Distribution Rate as of July of the Year Prior to the Filing, Applied to Massachusetts Electric's Average Customer Deliveries Fixed as of July 2004.	\$0.02542	per kWh
(5)	\$/kWh Adjustment to Massachusetts Electric's Distribution Rate from Application of the Regional Index - Increase (Decrease)	\$0.00103	per kWh
(6)	Percentage of Adjustment to Massachusetts Electric's Distribution Rates from Application of Regional Index - Increase (Decrease)	4.05%	
(1)	Exhibit SMM -2, Page 1 \$0.02542 per kWh ÷ \$0.02899 per kWh = 87.7%		
(2)	Exhibit SMM - 3, Page 1		
(3)	Line (1) x Line (2), truncated after five decimal places		
(4)	Exhibit SMM -2, Page 1		
(5)	Line (3) - Line (4)		
(6)	Line (5) ÷ Line (4)		

MASSACHUSETTS ELECTRIC COMPANY
NANTUCKET ELECTRIC COMPANY
d/b/a NATIONAL GRID
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## Exhibit SMM-2 Initial Calibration of Distribution Rates to Regional Index - July 1, 2004

### Massachusetts Electric Company Nantucket Electric Company Initial Calibration of Distribution Rates to Regional Index - July 1, 2004

				DISTRIBUTION July 2004							
		Total 2003	% of Total						Weighted		
Utility	State	MWh	MWh	Residential	Small C&I	Medium C&I	Large C&I	INDEX	Average		
				R	G1	G2	G3				
Connecticut Light & Power Company	CT	24,116,876	7.5%	3.455	5.140	3.092	1.361	2.763	0.207		
United Illuminating Company	CT	5,763,052	1.8%	4.933	5.151	3.299	1.775	3.512	0.063		
Boston Edison Company (NSTAR)	MA	14,961,539	4.7%	4.948	5.579	4.096	2.897	4.102	0.191		
Cambridge Electric Company (NSTAR)	MA	1,639,564	0.5%	3.581	2.547	2.049	1.113	2.319	0.012		
Commonwealth Electric Company (NSTAR)	MA	4,173,545	1.3%	5.156	4.184	2.474	1.278	3.196	0.041		
Fitchburg Gas & Electric Company (Unitil)	MA	515,669	0.2%	4.624	4.572	3.279	1.636	3.284	0.005		
Western Massachusetts Electric Company (Northeast Utilities)	MA	4,023,433	1.3%	4.054	4.762	2.554	1.582	2.961	0.037		
Bangor Hydro-Electric Company	ME	1,542,455	0.5%	5.554	4.778	2.720	2.399	3.867	0.019		
Maine Public Service Company	ME	540,214	0.2%	4.747	4.153	2.262	1.639	3.146	0.005		
Granite State Electric Company (National Grid)	NH	833,597	0.3%	4.317	3.826	1.741	1.221	2.717	0.007		
New Hampshire Electric Cooperative Inc.	NH	690,095	0.2%	5.547	4.073	3.737	2.751	4.078	0.009		
Unitil Energy Service, Inc.	NH	1,211,068	0.4%	3.021	3.561	2.091	1.366	2.306	0.009		
Narragansett Electric Company (National Grid)	RI	7,964,092	2.5%	4.188	4.470	2.427	1.648	2.991	0.074		
Atlantic City Electric Company (Conectiv Power Delivery)	NJ	9,642,644	3.0%	3.328	3.848	1.582	1.448	2.408	0.072		
Jersey Central Power & Light Company (FirstEnergy)	NJ	20,859,480	6.5%	2.687	4.307	2.398	2.044	2.554	0.166		
Public Service Electric & Gas Company	NJ	42,067,965	13.1%	3.564	3.516	2.428	1.516	2.613	0.342		
Rockland Electric Company (Orange & Rockland)	NJ	1,563,289	0.5%	3.319	3.630	3.048	2.670	3.062	0.015		
Consolidated Edison Company of New York	NY	43,362,087	13.5%	5.607	5.689	3.724	3.174	4.415	0.595		
Duquesne Light Company	PA	13,363,091	4.2%	4.021	3.456	1.864	0.976	2.494	0.104		
Metropolitan Edison Company (FirstEnergy)	PA	13,009,872	4.0%	4.075	4.498	2.424	1.377	2.847	0.115		
PECO Energy	PA	36,841,017	11.5%	5.234	2.601	1.795	1.513	3.067	0.351		
Pennsylvania Electric Company (FirstEnergy)	PA	13,400,384	4.2%	4.045	4.006	2.420	1.454	2.818	0.117		
Pennsylvania Power Company (FirstEnergy)	PA	4,258,641	1.3%	3.700	2.066	0.860	0.681	1.983	0.026		
Pennsylvania Power & Light Company	PA	35,417,470	11.0%	2.636	2.460	2.228	0.821	1.867	0.206		
UGI Utilities, Inc.	PA	978,551	0.3%	3.917	4.609	3.471	1.789	3.105	0.009		
West Penn Power Company (Allegheny Power)	PA	19,001,901	5.9%	2.618	1.880	1.655	0.849	1.733	0.102		
Total MWh Included in Weighted Average		321,741,591	100.0%								
Mass. Electric Customer Mix				37.90%	9.52%	14.34%	38.24%	100,00%			

Weighted Average By kWh 2.899

ı	Massachusetts Electric Company	3.359	4.461	2.033	1.444	2.542
	Mass. Electric as a Percentage Of Weighted Average	2.542 €	÷	2.899 €	=	87.7%

### General Notes

1) PF =100% for rate calculations

- 2) Time of use splits are based on period definitions. (ie. if peak period=9am-9pm on weekdays, then peak split =  $12/24 \times 5/7$ )

- 2) Time of use spints are based on period definitions, (i.e. it peak period—2nit-spin on weekdays, then peak spint—12/24 x 3/1)
  3) In all cases, the tariff selected is based on Massachusetts Electric Company average customers.
  4) In all cases, conservation charges not included.
  5) Residential and Small C&I assumed to be single phase/non-demand metered. Medium & Large C&I assumed to be three phase service, demand metered.
  6) Where Small C&I tariffs contained demand component, the Massachusetts Electric Company G1 average demand of 5.9 kW was used.
- 7) Hours use rates were calculated at average billing demand.

	Residential	Small C&I	Medium C&I	Large C&I
2003 Average Usage				
Billing Demand (kW)	0.0	5.9	50.9	554.7
Total kWh	671	1,328	16,627	228,957
Hrs. Use		225	327	413

NEW ENGLAND	Distribution Rates	Bill Calculations

										- 1						
Connecticut Light & Power Co.					1	30	35	56	1			30		35		56
JULY 2004	RES	SM C&I	MED C&I	LG C&I												
Customer Charge:					\$8.69	\$20.77	\$258.60	\$364.64	\$8	8.69		\$20.77		\$258.60		\$364.64
To	tal				\$0.02160				671 \$14	4.49						
First hrs	ise	300	400			\$0.02595	\$0.00315				1,328	\$34.46	16,627	\$52.38		
Excess hrs	ise					\$0.00220	\$0.00000				0	\$0.00	0	\$0.00		
On-Pe	ak			48%				\$0.00430							109,899	\$472.57
Off-Po	ak			52%				\$0.00000							119,058	\$0.00
DEMAND Total I	W						\$3.99	\$4.11					50.9	\$203.09	554.7	\$2,279.82
First k	W	2				\$0.00					2	\$0.00				
Excess 1	W					\$3.34					3.9	\$13.03				
TOTAL									\$23	3.18	•	\$68.26		\$514.07		\$3,117.03
EFFECTIVE RATE									3.	.455		5.140		3.092		1.361

<u>Rate</u> 1	Description Residential Electric Service	Availability  Available for the entire electrical requirements of single-family residences, residential outbuildings, individual apartments, and general service use in apartment buildings, where residential use constitutes over 50 perce the metered energy, and also available to farm customers.
30	Small General Electric Service	Available for the entire electrical requirements at a single service location where the customer's maximum demand is less that 350 kW. Where the Company deems it is impractical to deliver electricity through one servor where more than one meter has been installed for billing under a withdrawn rate, then the measurement of electricity may be by two or more meters
35	Intermediate General Electric Service	Available for the electrical requirements where the customer's maximum demand is less than 350 KWh and delivered at one point and at one standard voltage through one installation of transformers supplied by the Company. Service will be metered at one point by one installation of meters. The meter location will be determined by the Company. Where the Company deems it impractical to deliver electricity through one service, or where one meter has been installed for billing under a withdrawn rate, then the measure of electricity may be by two or more meters.
56	Intermediate Time-of-Day Electric Service for Non-Manufacturers	Available for the electrical requirements of customers delivered at one point and at one standard voltage through one installation of transformers supplied by the Company. Service will be metered at one point by one installation of meters. The meter location will be determined by the Company. Where the Company deems it impractical to deliver electricity through one service, or where more than one meter has been installed for billing under a withdrawn rate, then the measure of electricity may be two or more meters.

Notes: Peak split = 16/24\*5/7

For Large C&I chose rate for non-manufacturers as Massachusetts Electric has a larger proportion of non-manufacturers than manufacturers.

	Residential	Small C&I	Medium C&I	Large C&I
2003 Average Usage		Cai	Cai	Car
Billing Demand (kW)	0.0	5.9	50.9	554.7
Total kWh	671	1,328	16,627	228,957
Hrs. Use		225	327	413

NEW ENGLAND Distribution Rates Bill Calculations

												- 1		
The United Illuminating Comp	pany				R	GS	GS	GST	R	GS	0	S		GST
JULY 2004	RES	SM C&I	MED C&I	LG C&I										
Customer Charge:					\$8.30	\$8.62	\$24.13	\$33.30	\$8.30	\$8.62		\$24.13		\$33.30
Summer (June through September)														
Total						\$0.054253	\$0.028097			1,328 \$72.05	16,627 \$	467.17		
First kWh	500				\$0.034471				500 \$17.24					
Excess kWh					\$0.063683				171 \$10.89					
On-Peak				24%				\$0.047437					54,950	\$2,606.66
Shoulder													0	\$0.00
Off-Peak				76%				\$0.007590					174,007	\$1,320.71
Winter (October through May)														
Total						\$0.040406	\$0.016564			1,328 \$53.66	16,627 \$	275.41		
First kWh	500				\$0.034471				500 \$17.24					
Excess kWh					\$0.034471				171 \$5.89					
On-Peak				24%				\$0.029031					54,950	\$1,595.25
Shoulder													0	\$0.00
Off-Peak				76%				\$0.004744					174,007	\$825.49
DEMAND														
Summer On-Peak							\$4.79	\$2.85				243.81	554.7	\$1,580.90
Shoulder Excess											0.0	\$0.00	0.0	\$0.00
Off-Peak Excess							\$4.79				0.0	\$0.00	0.0	\$0.00
Winter On-Peak							\$3.06	\$1.57				155.75	554.7	\$870.88
Shoulder Excess											0.0	\$0.00	0.0	\$0.00
Off-Peak Excess							\$3.06	\$1.42			0.0	\$0.00	0.0	\$0.00
TOTAL WINTER									\$31.43			455.29		\$3,324.92
TOTAL SUMMER									\$36.43			735.11		\$5,541.57
EFFECTIVE ANNUAL									\$33.10		\$	548.56		\$4,063.80
EFFECTIVE RATE									4.933	5.151		3.299		1.775

Rate R	Description Residential Rate	Availability Service under this rate is for all normal residential requirements and qualifying veterans organizations, agricultural, campground and marina usage.
GS	General Service Rate	$Service\ under\ this\ rate\ is\ for\ all\ requirements\ on\ a\ Customer's\ Premises,\ provided\ the\ Customer's\ demand\ does\ not\ exceed\ 500\ kW\ in\ two\ consecutive\ months.$
GS	General Service Rate	$Service\ under\ this\ rate\ is\ for\ all\ requirements\ on\ a\ Customer's\ Premises,\ provided\ the\ Customer's\ demand\ does\ not\ exceed\ 500\ kW\ in\ two\ consecutive\ months.$
GST	General Service Time-of-Use Rate	Service under this rate is optional for all requirements on a Customers Premises, subject to the availability and installation of metering equipment.
Notes:	Peak split = 8/24*5/7 For Small C&I demand is not billed	as usage is less than 1560 kilowatt hours and demand is less than 8 kW

	Residential	Small C&I	Medium C&I	Large C&I
2003 Average Usage				
Billing Demand (kW)	0.0	5.9	50.9	554.7
Total kWh	671	1,328	16,627	228,957
Hrs. Use		225	327	413

NEW ENGLAND

Distribution Rates

Bill Calculations

					ı	1					1	-		
Boston Edison					A1 (R-1)	A9 (G-1)	B2 (G-2)	B3 (T-2)	A1 (R-1)	A9 (G-1)	B2 (	G-2)		B3 (T-2)
JULY 2004	RES	SM C&I	MED C&I	LG C&I	()	<10	(0 _)	()	122 (41.2)	12 (0 2)	,			== (= =)
Customer Charge:					\$6.43	\$8.14	\$18.19	\$166.67	\$6.43	\$8.14		\$18.19		\$166.67
Summer (June through September)														
Total					\$0.03989	\$0.06832		\$0.00089	671 \$26.77	1,328 \$90.73	16,627	\$0.00	228,957	\$203.77
First kWh			2,000				\$0.02225				2,000	\$44.50		
Excess kWh											14,627	\$0.00		
First hrs use			39.3								2,000	\$0.00		
Next hrs use			150				\$0.00900				7,635	\$68.72		
Excess hrs use							\$0.00589				6,992	\$41.18		
Winter (October through May)														
Total					\$0.03989	\$0.04033		\$0.00089	671 \$26.77	1,328 \$53.56		\$0.00	228,957	\$203.77
First kWh			2,000				\$0.01232					\$24.64		
Excess kWh											14,627	\$0.00		
First hrs use			39.3								2,000	\$0.00		
Next hrs use			150				\$0.00727					\$55.51		
Excess hrs use							\$0.00540				6,992	\$37.76		
DEMAND														
Summer First kW			10	0			\$0.00	\$17.51			10	\$0.00	0.0	\$0.00
Excess kW							\$20.22	\$17.51				827.00	554.7	\$9,712.80
Winter First kW			10	0			\$0.00	\$8.18			10	\$0.00	0.0	\$0.00
Excess kW							\$9.43	\$8.18				385.69	554.7	\$4,537.45
TOTAL WINTER									\$33.20			521.79		\$4,907.89
TOTAL SUMMER									\$33.20			999.59		\$10,083.24
EFFECTIVE ANNUAL									\$33.20			681.06		\$6,633.01
EFFECTIVE RATE									4.948	5.579		4.096		2.897

Rate A1 (F		sidential	Availability  This rate is available for lighting, heating and other uses in residential premises, for service in an edifice set apart exclusively for public worship, condominium common area and cooperative apartment common areas excluding hotels and apartment buildings of ten or more dwelling units where the bills are not rendered by the Company directly to the individual tenants. This rate is closed for expansion to nursing homes. Service under this rate to any Customer is subject to both the Company's Printed requirements and the Company's Terms and Conditions - Distribution Service, each as in effect from time to time.
A9 (0	G-1) Gen		This rate is available for all non-residential uses of electricity to all Customers whose load for billing purposes does not exceed or is estimated to not exceed 10 kilowatts. Customers with a demand exceeding 12 kilowatts in any month will be placed on Rate G-2. Demand meters will be installed for all new customers with either: (a) three-phase service or (b) single-phase service exceeding 100 amperes. Service under this rate is subject to both the Company's printed requirements and the Company's Terms and Conditions - Distribution Service, each as in effect from time to time.
B2 (C	G-2) Gen		Service under this rate is available for all use at a single location where the service voltage is less than 10,000 volts and the monthly demand is equal to or greater that 10 kilowatts. Rate G-2 Customers with demands less than 8 kilowatts for at least one year will be placed on Rate G-1. Rate G-2 Customers with a monthly demand equal or greater than 200 kW will be evaluated for transfer to Rate T-2. Additionally, all new Customers with a monthly demand equal or greater than 200 kW will be placed on Rate T-2. Service under this rate is subject to both the Company's printed requirements and the Company's Terms and Conditions - Distribution Service, each as in effect from time to time.
В3 (Т	Γ-2) Tim		Service under this rate is available for all use at a single location where the service voltage is less than 10,000 volts and the monthly demand is equal to or greater that 10 kilowatts. Customers with demands less than 150 kW will be evaluated for transfer to Rate G-2. Service under this rate is subject to both the Company's printed requirements and the Company's Terms and Conditions - Distribution Service, each as in effect from time to time.
NT.	A 1*	P - 4 - 1 - 4 - 4 - 5 - 1 - 1 5 4*	

Notes: Adjusted rates to include pension adjustment factor per tariff.

	Residential	Small C&I	Medium C&I	Large C&I
2003 Average Usage		-	-	041
Billing Demand (kW)	0.0	5.9	50.9	554.7
Total kWh	671	1,328	16,627	228,957
Hrs. Use		225	327	413

NEW ENGLAND	Distribution Rates	Bill Calculations

Cambridge Ele	ectric					01 (R-1)	06 (G-0)	02 (G-1)	62 (G-2)	01 (R-1)		06 (G-0)		02 (G-1)		62 (G-2)
JULY 2004		RES	SM C&I	MED C&I	LG C&I											
Customer Charge:						\$6.87	\$4.62	\$7.32	\$90.00	\$6.8	7	\$4.62		\$7.32		\$90.00
	Total					\$0.02558	\$0.02199	\$0.00939	\$0.00617	671 \$17.1	5 1,32	8 \$29.20	16,627	\$156.13	228,957	\$1,412.66
DEMAND																
	First kW			10	100			\$0.87	\$1.09				10	\$8.70	100.0	\$109.00
E	xcess kW							\$4.12	\$2.06				40.9	\$168.51	454.7	\$936.68
TOTAL										\$24.0	3	\$33.82		\$340.66		\$2,548.34
EFFECTIVE RATE										3.58	1	2.547		2.049		1.113

<u>Rate</u> 01 (R-1)	<u>Description</u> Residential	Availability  This rate is available for all domestic uses in a single private dwelling, in an individual apartment or in a residential condominium in which the principal means of heating the premises is not provided by permanently installed electric space heating equipment. Service under this rate to residential condominiums is available to the extent permitted by applicable regulations of the Massachusetts Department of Telecommunications and Energy. Service under this rate is subject to both the Company's printed requirements and the Company's Terms and Conditions - Distribution Service, each as in effect from time to time.
06 (G-0)	General (Non-Demand)	This rate is available for all non-residential uses of electricity to all Customers whose load for billing purposes does not exceed or is estimated not to exceed 10 kilowatts in any three (3) consecutive billing months. Service under this rate is subject to both the Company's printed requirements and the Company's Terms and Conditions - Distribution Service, each as in effect from time to time.
02 (G-1)	General	This rate is available for all non-residential uses of electricity to all Customers whose load for billing purposes is or is estimated to be greater than 10 kilowatts for three consecutive billing months but not greater than 100 kilowatts in each of 12 consecutive billing months. Service under this rate is subject to both the Company's printed requirements and the Company's Terms and Conditions - Distribution Service, each as in effect from to time.
62 (G-2)	Large General Time-of-Use Secondary Service	This rate is available for all of electricity to Customers whose metered load exceeds or is estimated to exceed 100 kilowatts for at least 12 consecutive billing months. Service under this rate is subject to both the Company's printed requirements and the Company's Terms and Conditions - Distribution Service, each as in effect from time to time.
Notes:	Adjusted rates to include pension	adjustment factor per tariff.

	Residential	Small C&I	Medium C&I	Large C&I
2003 Average Usage				
Billing Demand (kW)	0.0	5.9	50.9	554.7
Total kWh	671	1,328	16,627	228,957
Hrs. Use		225	327	413

NEW ENGLAND Distribution Rates **Bill Calculations** 

					** (** *)	** (** *)						(0.4)		
PPG	CD F CO F	MED GOV	Y C COY	32 (R-1)	33 (G-1)	33 (G-1)	24 (G-3)	32 (R-1)		33 (G-1)		33 (G-1)		24 (G-3)
RES	SM C&I	MED C&I	LG C&I	ea 50	05.50	05.50	#000.00	#2.70		05.50		05.50		****
				\$3.73	\$5.53	\$5.53	\$900.00	\$3./3		\$5.53		\$5.53		\$900.00
				#0.04500				671 000 07						
	2 200	2 200		\$0.04600	00.000.00	#0.00 <b>7.</b> 57		6/1 \$30.8/		<b>#50.00</b>	2 200	00001		
	2,300	2,300							,					
			270/		\$0.00840	\$0.00840	#0.000.4 <b>5</b>		0	\$0.00	14,327	\$120.35	C1 010	0505.40
													. ,	\$585.42
														\$349.07
			33%				\$0.00493						125,926	\$620.82
				¢0.04600				671 620.07						
	2 200	2 200		\$0.04600	\$0.02767	\$0.02767		0/1 \$30.87		¢50.02	2 200	¢06.64		
	2,300	2,300							, , ,					
			150/		\$0.00840	\$0.00840	\$0,000.47		0	\$0.00	14,327	\$120.33	24 244	\$325.24
													- /-	\$525.24 \$581.78
													,	\$581.78 \$620.82
			33%											\$488.14
	10	10			\$0.00	00.02	,		6	\$0.00	10	\$0.00	334.7	\$466.14
	10	10												
	10	10												
	10	10												
					34.00	\$4.60		\$24.60			40.9			\$2,915.98
														\$2,943.45
														\$2,925.14
														1.278
	RES	2,300 2,300	2,300 2,300 2,300 2,300 10 10	2,300 2,300  27% 18% 55%  2,300 2,300  1.5% 30% 55%	2,300 2,300 \$0.04600 \$0.04600 \$2.300 2,300 \$0.04600 \$0.04	2,300 2,300 \$0.04600 \$0.03767 \$0.00840 \$0.03767 \$0.00840 \$0.03767 \$0.00840 \$0.03767 \$0.00840 \$0.03767 \$0.00840 \$0.03767 \$0.00840 \$0.03767 \$0.00840	2,300 2,300 \$0.04600 \$0.03767 \$0.00840	2,300 2,300 S0.04600 S0.03767 S0.03767 S0.00840	\$3.73 \$5.53 \$900.00 \$3.73 \$0.04600 \$0.03767 \$0.03767 \$0.00840 \$0.00947 \$0.00847 \$0.00947 \$0.00847 \$0.00947 \$0.	2,300 2,300	2,300 2,300 2,300 \$0.04600 \$0.03767 \$0.03767 \$0.00840 \$0.00840 \$0.00840 \$0.00847 \$0.00947 \$0.	2,300   2,300   \$0.04600   \$0.03767   \$0.03767   \$0.00840   \$0.00840   \$0.00840   \$0.00840   \$0.00847   \$0.00947   \$0.0	\$3,73 \$5.53 \$5.53 \$900.00 \$3.73 \$5.5	2,300 2,300 2,300

<u>Rate</u> 32 (R-1)	<u>Description</u> Residential	Availability  This rate is available for all domestic uses in a single private dwelling, in an individual apartment or in a residential condominium. Service under this rate to residential condominiums is available to the extent permitted by applicable regulations of the Massachusetts Department of Telecommunications and Energy. Service under this rate shall be Annual or Seasonal hereinafter defined an is subject to both the Company's printed requirements and the Company's Terms and Conditions - Distribution Service, each as in effect from time to time.
33 (G-1)	General	This rate is available for all non-residential uses of electricity to all Customers except those customers whose load for billing purposes either exceeds or is estimated to exceed 100 kilowatts in each of 12 consecutive billing months. Service under this rate is subject to both the Company's printed requirements and the Company's Terms and Conditions - Distribution Service, each as in effect from time to time.
33 (G-1)	General	This rate is available for all non-residential uses of electricity to all Customers except those customers whose load for billing purposes either exceeds or is estimated to exceed 100 kilowatts in each of 12 consecutive billing months. Service under this rate is subject to both the Company's printed requirements and the Company's Terms and Conditions - Distribution Service, each as in effect from time to time.
24 (G-3)	Large General Time-of-Use	This rate is available for all uses of electricity to Customers who establish demands in excess of 500 kilowatts for at least 12 consecutive month. Service under this rate is subject to both the Company's printed requirements and the Company's Terms and Conditions - Distribution Service, each as in effect from time to time.

Winter Pk split = 5/24\*5/7, Summer pk = 9/24\*5/7, Offpk = 9/24\*5/5+24/24\*2/7 Adjusted rates to include pension adjustment factor per tariff.

Notes:

	Residential	Small C&I	Medium C&I	Large C&I
2003 Average Usage				
Billing Demand (kW)	0.0	5.9	50.9	554.7
Total kWh	671	1,328	16,627	228,957
Hrs. Use		225	327	413

Bill Calculations

Fitchburg G	as & Electric					R1	GD2	GD2	GD3	R1	G	GD2		GD2		GD3
JULY 2004		RES	SM C&I	MED C&I	LG C&I											
Customer Charge:						\$3.02	\$6.83	\$6.83	\$500.00	\$3.02		\$6.83		\$6.83		\$500.00
	Total					\$0.04174	\$0.01419	\$0.01419		671 \$28.01	1,328	\$18.84	16,627	\$235.94		,
	On-Peak				45%				\$0.01225						103,031	\$1,262.13
	Off-Peak				55%				\$0.00275						125,926	\$346.30
DEMAND	Total kW						\$5.94	\$5.94	\$2.95		5.9	\$35.05	50.9	\$302.35	554.7	\$1,636.37
TOTAL										\$31.03		\$60.72		\$545.12		\$3,744.80
EFFECTIVE RATE	•	•								4.624		4.572		3.279	•	1.636

Distribution Rates

<u>Rate</u> R1	<u>Description</u> Residential Delivery Service	Availability  Service is available under this Schedule for all domestic purposes at individual private dwellings and in individual apartments and apartment or condominium buildings, and for churches and farms that received service under this rate prior to the effective date of this tariff page. Single Phase motors exceeding 5 horsepower will be allowed only upon approval by the Company in each instance. When service is delivered through one meter and used for both domestic and nondomestic purposes, billing shall be under this Schedule only if the predominant use of demand, determined by the Company on the basis of metered load data, connected loads, or consumption, is for domestic purposes. This Schedule is for delivery service only. Customers are required to obtain an energy supply from a Competitive Supplier or may be eligible for Standard Offer Service or Default Service from the Company pursuant to Schedules SOS or DS as amended from time to time. This Schedule is not available for service furnished for commercial or business purposes including garages, motels, hotels, and boarding houses or residences in which three or more rooms are rented, or for any other non-residential purposes.
GD2	Regular General Delivery Service	Service is available under this Schedule at single locations to Commercial and Industrial customers where the Company delivers electricity for the exclusive use of the customer and not for resale. This Schedule is for delivery service only. Customers are required to obtain an energy supply from a Competitive Supplier or may be eligible for Standard Offer Service or Default Service from the Company pursuant to Schedules SOS or as amended from time to time. For commercial Customers with demands, excluding space heating and water heating loads eligible under the G-5 rate, consistently greater than or equal to four (4) kilowatts or energy consumption consistently greater than or equal to eight hundred fifty (850) kilowatt-hours per month and generally less than one hundred twenty thousand (120,000) kilowatt-hours per month.
GD2	Regular General Delivery Service	Service is available under this Schedule at single locations to Commercial and Industrial customers where the Company delivers electricity for the exclusive use of the customer and not for resale. This Schedule is for delivery service only. Customers are required to obtain an energy supply from a Competitive Supplier or may be eligible for Standard Offer Service or Default Service from the Company pursuant to Schedules SOS or as amended from time to time. For commercial Customers with demands, excluding space heating and water heating loads eligible under the G-5 rate, consistently greater than or equal to four (4) kilowatts or energy consumption consistently greater than or equal to eight hundred fifty (850) kilowatt-hours per month and generally less than one hundred twenty thousand (120,000) kilowatt-hours per month.
GD3	Large General Delivery Service	Service is available under this Schedule at single locations to Commercial and Industrial customers where the Company delivers electricity for the exclusive use of the customer and not for resale. This Schedule is for delivery service only. Customers are required to obtain an energy supply from a Competitive Supplier or may be eligible for Standard Offer Service or Default Service from the Company pursuant to Schedules SOS or as amended from time to time. For any industrial or large commercial Customer not participating in special contract rates with energy consumption generally greater than or equal to one hundred twenty thousand (120,000) kilowatt-hours per month.
Notes:	Peak split = 15/24*5/7	

Notes:

Straightforward mapping of rates.

	Residential	Small C&I	Medium C&I	Large C&I
2003 Average Usage				
Billing Demand (kW)	0.0	5.9	50.9	554.7
Total kWh	671	1,328	16,627	228,957
Hrs. Use		225	327	413

**Bill Calculations** 

Western I	Mass. Electric					R-1	G-0	G-0	T-2	R-1		G-0		G-0		T-2
JULY 2004		RES	SM C&I	MED C&I	LG C&I											
Customer Charge:						\$8.53	\$31.92	\$31.92	\$2,700.95	\$8.5	3	\$31.92		\$31.92		\$2,700.95
	Total					\$0.02783	\$0.00000	\$0.00000		671 \$18.6	7 1,328	\$0.00	16,627	\$0.00		
DEMAND	Total kW								\$1.66						554.7	\$920.80
	First kW		2	. 2			\$0.00	\$0.00			2	\$0.00	2	\$0.00		
	Excess kW						\$8.03	\$8.03			3.9	\$31.32	48.9	\$392.67		
TOTAL										\$27.2	0	\$63.24		\$424.59		\$3,621.75
EFFECTIVE RATE										4.05	4	4,762		2,554		1.582

Distribution Rates

	_	1												
<u>Rate</u> R-1	<u>Description</u> Residential								ouildings, farms, and in			uses of electricity	constitute more th	an 50% of customers
G-0	Small General Service	Company deer supplied shall	ns it impractions is the for the exc	cal to deliver lusive use of	electricity thro	ough one servi	es or where one e resold. With th	meter has been ne approval of t	kW. All electricity del installed, then the mea ne Company the custom pecific charge for, or re	asurement of the am mer may furnish elec	ount of electricity ctricity to persons	consumed may be or concerns who o	by two or more m occupy space in the	eters. All electricity building to which
G-0	Small General Service	Company deer supplied shall	ns it impractions the for the exc	cal to deliver lusive use of	electricity thro	ough one servi	es or where one e resold. With th	meter has been ne approval of t	kW. All electricity del installed, then the mea ne Company the custon pecific charge for, or re	asurement of the am mer may furnish elec	ount of electricity ctricity to persons	consumed may be or concerns who o	by two or more m occupy space in the	eters. All electricity building to which
T-2	Large Primary Service Time-of-Use	impractical to may furnish ele (or submeter)	deliver electri ectricity to pe or measure or	city through or rsons or conc control the us	one service, or erns who occu se of any of the	where more the apy space in the e electricity so	nan one meter ha e building to whi	is been installed ich service is su omers whose n	, then the measurement applied hereunder, but of aximum demand equa	nt of electricity may on the express condi	be by two or more tion that the custo	meters. With the mer shall not rese	approval of the Co	mpany the customer charge for, or remeter

	Residential	Small	Medium	Large
		C&I	C&I	C&I
2003 Average Usage				
Billing Demand (kW)	0.0	5.9	50.9	554.7
Total kWh	671	1,328	16,627	228,957
Hrs. Use		225	327	413

NEW ENGLAND Distribution Rates Bill Calculations

Bangor Hydro-Elec Compa	nny				A	B-1	D-1	D-1		A		B-1		D-1		D-1
JULY 2004	RES	SM C&I	MED C&I	LG C&I												
Customer Charge:					\$5.56	\$12.83	\$39.50	\$39.50		\$5.56		\$12.83		\$39.50		\$39.50
Off-Peak Season(March through October)																
Tota	1					\$0.03812	\$0.01912	\$0.01912			1,328	\$50.62	16,627	\$317.91	228,957	\$4,377.66
First kW	h 100				\$0.00000				100	\$0.00						
Excess kW	h				\$0.05553				571	\$31.71						
Peak Season (November through February)																
Tota	1					\$0.03812	\$0.02177	\$0.02177			1,328	\$50.62	16,627	\$361.97	228,957	\$4,984.39
First kW	h 100				\$0.00000				100	\$0.00						
Excess kW	h				\$0.05553				571	\$31.71						
DEMAND																
Off-Peak Season First kW			0	0			\$0.00	\$0.00					0	\$0.00	0.0	\$0.00
Excess kV	7						\$1.44	\$1.44					50.9	\$73.30	554.7	\$798.77
Peak Season First kW			0	0			\$0.00	\$0.00					0	\$0.00	0.0	\$0.00
Excess kV	7						\$1.84	\$1.84					50.9	\$93.66	554.7	\$1,020.65
TOTAL PEAK SEASON										\$37.27		\$63.45		\$495.13		\$6,044.54
TOTAL OFF PEAK SEASON										\$37.27		\$63.45		\$430.71		\$5,215.93
EFFECTIVE ANNUAL										\$37.27		\$63.45		\$452.18		\$5,492.13
EFFECTIVE RATE										5.554		4.778		2.720		2.399

Rate	Description	<u>Availability</u>
Ā	Residential Service Rate	Service under this rate is available for lighting and other domestic purposes in individual residences and individual apartments. It is not applicable where the use of electricity is for commercial purposes. Customers taking service under this rate schedule are responsible for paying both Distribution service and Stranded Cost.
B-1	General Service Rate	Service under this rate is available for all commercial purposes to customers with billing demands of less than 25 kW. The 25 kW ceiling that applied to existing customers receiving service under this rate prior to November 1, 1986 is removed. Customers taking service under this rate schedule are responsible for paying both Distribution Service and Stranded Cost.
D-1	Large Power Rate - Secondary	Service under this rate is available for all commercial and industrial where the customer agrees to pay for service on this basis of 25 kW or more of demand. Customers taking service under this rate schedule are responsible for paying both Distribution Service and Stranded Cost.
D-1	Large Power Rate - Secondary	Service under this rate is available for all commercial and industrial where the customer agrees to pay for service on this basis of 25 kW or more of demand. Customers taking service under this rate schedule are responsible for paying both Distribution Service and Stranded Cost.
Notes:	Adjusted rates to remove Conservation	vation Assessment Charge which is included in the distribution rates listed in tariff.

	Residential	Small C&I	Medium C&I	Large C&I
2003 Average Usage				
Billing Demand (kW)	0.0	5.9	50.9	554.7
Total kWh	671	1,328	16,627	228,957
Hrs. Use		225	327	413

NEW ENGLAND Distribution Rates Bill Calculations
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Maine Public Service					A	С	E-S	E-S		A		С		E-S		E-S
JULY 2004	RES	SM C&I	MED C&I	LG C&I												
Customer Charge:					\$4.75	\$11.97	\$41.46	\$41.46		\$4.75		\$11.97		\$41.46		\$41.46
Summer (April through October)																
Total						\$0.019605	\$0.000000	\$0.000000			1,328	\$26.04	16,627	\$0.00	228,957	\$0.00
First kWh	100				\$0.000000				100	\$0.00						
Excess kWh					\$0.047459				571	\$27.10						
Winter (November through March)																
Total						\$0.050579	\$0.003161	\$0.003161			1,328	\$67.17	16,627	\$52.56	228,957	\$723.73
First kWh	100				\$0.000000				100	\$0.00						
Excess kWh					\$0.047459				571	\$27.10						
DEMAND																
Summer Total							\$4.37	\$4.37					50.9	\$222.43	554.7	\$2,424.04
Winter Total							\$8.63	\$8.63					50.9	\$439.27	554.7	\$4,787.06
TOTAL WINTER										\$31.85		\$79.14		\$533.29		\$5,552.25
TOTAL SUMMER										\$31.85		\$38.01		\$263.89		\$2,465.50
EFFECTIVE ANNUAL										\$31.85		\$55.15		\$376.14		\$3,751.65
EFFECTIVE RATE										4.747		4.153		2.262		1.639

Rate A	<u>Description</u> Residential Service	Availability  This rate is available to any year-round customer for residential service as defined in the Company's Terms and Conditions.
С	General Service	Except as provided under "Special Terms and Conditions", this rate is available to any customer whose monthly demand requirements are not in excess of 50 kilowatts during any two of the five consecutive months from November through March for commercial or industrial purposes used through one metered service.
E-S	Large Power Service - Secondary	This rate is available to any industrial, commercial or general customer whose service is taken at secondary voltage and whose maximum demand is at least 50 kilowatts but less than 500 kilowatts during any two of the five consecutive months from November through March and who is not taking service under Rate E-S-T. Contracts for 500 kilowatts or more must be in writing.
E-S	Large Power Service - Secondary	This rate is available to any industrial, commercial or general customer whose service is taken at secondary voltage and whose maximum demand is at least 50 kilowatts but less than 500 kilowatts during any two of the five consecutive months from November through March and who is not taking service under Rate E-S-T. Contracts for 500 kilowatts or more must be in writing.
Notes:	Straightforward mapping of rates.	

	Residential	Small C&I	Medium C&I	Large C&I
2003 Average Usage				
Billing Demand (kW)	0.0	5.9	50.9	554.7
Total kWh	671	1,328	16,627	228,957
Hrs. Use		225	327	413

**Bill Calculations** 

Granite State	Electric					D	G3	G2	G1		D		G3		G2		G1
JULY 2004		RES	SM C&I	MED C&I	LG C&I												
Customer Charge:						\$4.72	\$5.95	\$26.87	\$100.34		\$4.72		\$5.95		\$26.87	I	\$100.34
	Total						\$0.03378	\$0.00092				1,328	\$44.86	16,627	\$15.30	I	
	First kWh	250				\$0.01830				250	\$4.58					I	
	Excess kWh					\$0.04672				421	\$19.67					I	
	On-Peak				39%				\$0.00203							89,293	\$181.26
	Off-Peak				61%				\$0.00057							139,664	\$79.61
DEMAND	Total kW							\$4.86	\$4.39					50.9	\$247.37	554.7	\$2,435.13
TOTAL	•	•									\$28.97	•	\$50.81		\$289.54		\$2,796.34
EFFECTIVE RATE											4.317		3.826		1,741	1	1.221

Distribution Rates

Rate D	<u>Description</u> Domestic Service Rate	Availability  Retail Delivery Service under this rate is available for all domestic purposes in an individual dwelling or an individual apartment and for farm purposes. If electricity is delivered through more than one meter, the charge for electricity delivered through each meter shall be computed separately under this rate.
G3	General Service Rate	Retail Delivery Service under this rate is available for all purposes except for resale. A Customer will take delivery service on this rate if the Company estimates that its average use will be less than 20 kW of demand. If electricity is delivered through more than one meter, except at the Company's option, the charge for electricity delivered through each meter shall be computed separately under this rate.
G2	General Long Hour Service Rate	Retail Delivery Service under this rate is available for all purposes except resale, subject to the provisions of this section. A Customer will take delivery service on this rate if the Company estimates that its average use be greater than or equal to 20 kW of Demand but is less than 200 kW of Demand. If electricity is delivered through more than one meter, except at the Company's option, the charge for electricity delivered through each meter shall be computed separately under this rate. A customer may be transferred from rate G-2 at its request or at the option of the Company if the customer's twelve (12) month average monthly demand is less than 18 kW of demand for three consecutive months. If any electricity is delivered hereunder at a given location, then all electricity delivered by the Company at such location shall be furnished hereunder, except such electricity and be delivered under the provisions of the Limited Commercial Space Heating Rate V.
Gl	General Service Time-of-use Rate	Retail Delivery Service under this rate is available for all purposes except resale, subject to the provisions of this section. A Customer will take delivery service on this rate if the Company estimates that its average use be greater than or equal to 200 kW of Demand. A Customer may be transferred from rate GI at its request or at the option of the Company if the customer's 12 month average monthly demand is less than 180 kW of Demand for 3 consecutive months. If electricity is delivered through more than one meter, except at the Company's option, the charge for electricity delivered through each meter shall be computed separately under this rate. If any electricity is delivered hereunder at a given location, then all electricity delivered by the Company at such location shall be furnished hereunder, except such electricity as may be delivered under the provisions of the Limited Commercial Space Heating Rate V. The actual delivery of service and the rendering of bills under this rate is contingent upon the installation of the necessary ting use metering equipment by the Company; supplier to both the availability of such meters from the Company's supplier and the conversion or installation procedures established by the Company. All customers served on this rate must elect to take their total electric service under the time use metering installation as approved by the Company. If delivery is through more than one meter, except at the Company's option, the Monthly Charge for service through each meter shall be computed separately under this rate.

Notes: Peak split = 13/24\*5/7

Distribution energy charge includes Business Profits Tax Surcharge.

	Residential	Small C&I	Medium C&I	Large C&I
2003 Average Usage				
Billing Demand (kW)	0.0	5.9	50.9	554.7
Total kWh	671	1,328	16,627	228,957
Hrs. Use		225	327	413

NEW ENGLAND	Distribution Rates	Bill Calculations
<del></del>		

NH Electric Co-Op					В	В	LB3	P	В	В	LB3		P
JULY 2004	RES	SM C&I	MED C&I	LG C&I				<500kW					
Customer Charge:					\$20.00	\$20.00	\$240.00	\$625.00	\$20.00	\$20.0	\$240.0	0	\$625.00
Total					\$0.02567	\$0.02567	\$0.01900	\$0.01540	671 \$17.22	1,328 \$34.0	9 16,627 \$315.9	1 228,957	\$3,525.94
DEMAND													
First kW			40	125			\$0.00				40 \$0.0	0 125.0	\$0.00
Excess kW							\$6.00	\$5.00			10.9 \$65.4	0 429.7	\$2,148.50
TOTAL									\$37.22	\$54.0	\$621.3	1	\$6,299.44
EFFECTIVE RATE									5.547	4.07	3.73	7	2.751

Rate B	<u>Description</u> Standard Basic Service	Availability  Basic Service is available for any single-phase service including individual residentces, apartments, and business, provided that such service is less than or equal to 400 amps.
В	Standard Basic Service	Basic Service is available for any single-phase service including individual residentces, apartments, and business, provided that such service is less than or equal to 400 amps.
LB3	Basic 3 Phase (>=50<150 kW)	This service is for those members whose registered kilowatt demand is greater or equal to 50 kilowatts but less than 150 kilowatts for three or more billing periods of a 12-month period. The load of each member who receives this service will be reviewed periodically to determine whether they meet this criterion for the Large Basic Three Phase service.
P	Primary Service	This service is available for primary voltage electricity delivered for general service in a specified location furnished to any member who agrees to own, furnish, maintain and be sole responsible for all wiring, structures, transforming and regulating devices, and all other fixtures and apparatus used in conducting the flow of electric energy delivered to the member by the Cooperative from the load side of the metering equipment. In locations in which space limitations or other factors make it impossible or inadvisable, in the opinion of the Cooperative, for the member to have transforming apparatus devoted to his exclusive uses, and in secondary network areas in which primary service is not made available by the Cooperative, at the Cooperative's option, service shall be supplied from Cooperative-owned transforming apparatus which also supplies other members. In such cases, the member is subject to additional charges in accordance with the Cooperative's Schedule of Fees, Charges and Rates.

Notes: Straightforward mapping of rates.

Notes:

Straightforward mapping of rates.

	Residential	Small C&I	Medium C&I	Large C&I
2003 Average Usage		car	cui	car
Billing Demand (kW)	0.0	5.9	50.9	554.7
Total kWh	671	1,328	16,627	228,957
Hrs. Use		225	327	413

**Bill Calculations** 

Unitil Energ	y Services, Inc					D	G-2	G-2	G-1		D		G-2		G-2		G-1
JULY 2004		RES	SM C&I	MED C&I	LG C&I												
Customer Charge:						\$7.00	\$9.00	\$9.00	\$182.85		\$7.00		\$9.00		\$9.00	I	\$182.85
	Total						\$0.00160	\$0.00160	\$0.00160			1,328	\$2.12	16,627	\$26.60	228,957	\$366.33
	First kWh	250				\$0.01393				250	\$3.48					I	
	Excess kWh					\$0.02326				421	\$9.79					<u> </u>	
DEMAND	Total kW						\$6.13	\$6.13	\$4.65			5.9	\$36.17	50.9	\$312.02	554.7	\$2,579.36
TOTAL											\$20.27		\$47.29		\$347.62		\$3,128.54
EFFECTIVE RATE	•						•				3.021	<u> </u>	3.561		2.091		1.366

Distribution Rates

EFFECTIVE	KAIE						3.021	3.561	2.091	1.300
<u>Rate</u> D	<u>Description</u> Domestic Delivery Service						I herein at the individual private dwell to other customers. Single phase mot			
G-2	Regular General Service	Single phase motors exceeding energy supplier from a Comp	g (5) horsepower will etitive Supplier, self-su	be allowed only apply, or may be	upon approval by eligible for Tran	the Company sition Service of	udes the operation of single phase mo in each instance. Effective on Choice or Default Service pursuant to Schedul d general less than one-hundred thous	Date, this Schedule is for de es TS or DS as amended from	livery service only. Customers n time to time. For any industr	are required to obtai
G-2	Regular General Service	Single phase motors exceeding energy supplier from a Comp	g (5) horsepower will etitive Supplier, self-so	be allowed only apply, or may be	upon approval by eligible for Tran	the Company sition Service of	udes the operation of single phase mo in each instance. Effective on Choice or Default Service pursuant to Schedul d general less than one-hundred thous	Date, this Schedule is for de es TS or DS as amended from	livery service only. Customers n time to time. For any industr	are required to obtain
G-1	Large General Service	Single phase motors exceeding energy supplier from a Comp	g (5) horsepower will etitive Supplier, self-su	be allowed only apply, or may be	upon approval by eligible for Tran	the Company sition Service of	udes the operation of single phase mo in each instance. Effective on Choice or Default Service pursuant to Schedul res of demand and generally greater th	Date, this Schedule is for de es TS or DS as amended from	livery service only. Customers n time to time. For any indus	s are required to obtai trial or commercial

	Residential	Small C&I	Medium C&I	Large C&I
2003 Average Usage				
Billing Demand (kW)	0.0	5.9	50.9	554.7
Total kWh	671	1,328	16,627	228,957
Hrs. Use		225	327	413

NEW ENGLAND	Distribution Rates	Bill Calculations

						1					1	_			
Narraga	ansett Electric					A16	C06	G02	G32	A16	C06		G02		G32
JULY 2004		RES	SM C&I	MED C&I	LG C&I										
Customer Charge:						\$2.54	\$5.73	\$103.41	\$236.43	\$2.54	\$5	.73	\$103.41		\$236.43
	Total					\$0.03642	\$0.03860	\$0.00992	\$0.01101	671 \$24.44	1,328 \$51	.26 16,627	\$164.94	228,957	\$2,520.82
DEMAND	Total kW								\$1.56					554.7	\$865.33
	First kW			10				\$0.00				10	\$0.00		
	Excess kW							\$2.91				40.9	\$119.02		
TOTAL										\$26.98	\$50	.99	\$387.37		\$3,622.58
GET	4%									\$1.12	\$2	.37	\$16.14		\$150.94
TOTAL WITH GET										\$28.10	\$59	.36	\$403.51		\$3,773.52
EFFECTIVE RATE						,				4.188	4.	170	2.427		1.648

Rate A16	<b>Description</b>	Availability  Electric delivery service under this rate is available for all domestic purposes in an individual private dwelling or an individual private apartment. Notwithstanding the foregoing, service is not available under this rate for any customer required to take service on the Residential Time-of-Use Rate A-32. Service is also available for farm customers where all electricity is delivered by the Company. The Company may under unusual circumstances permit more than one set of living quarters to be served through one metering installation under this rate, but if so, the Customer Charge shall be multiplied by the number of separate living quarters so served. A church and adjacent buildings owned and operated by the church may be served under this rate, but any such buildings separated by public ways must be billed separately.
C06	Small C&I Rate	Electric delivery service under this rate is available for all purposes. If electricity is delivered through more than one meter, except at the Company's option, the Monthly Charge for service through each meter shall be computed separately under this rate. Notwithstanding the foregoing, the Company may require any customer with a 12n onth average demand greater than 200 kW to take service on the 200 kW Demand Rate G-32. If any electricity is delivered hereunder at a given location, then all electricity delivered by the Company at such location shall be delivered hereunder, except such electricity as may be delivered under the provisions of the Limited Service - Business Space Heating (V-02) rate.
G02	General C&I Rate	Electric delivery service under this rate is available for all purposes to customers with a Demand of 10 kilowatts or more. If electricity is delivered through more than one meter, except at the Company's option, the Monthly Charge for service through each meter shall be computed separately under this rate. Notwithstanding the foregoing, the Company may require any customer with a highest parameter than 200 kW to take service on the 200 kW Demand Rate G-32. If any electricity is delivered hereunder at a given location, then all electricity delivered by the Company at such location shall be delivered hereunder, except such electricity as may be delivered under the provisions of the Limited Service Business Space Heating (V-02) rate.
G32	200 kW Demand Rate	Electric delivery service shall be taken under this rate for all purposes by any customer who is placed on the rate by the Company in accordance with this paragraph. The Company shall place on this rate any customer has a 12-month average Demand of 200 kW or greater for 3 consecutive months as soon as practicable. Notwithstanding the foregoing, the Company may require any customer with a 12-month maximum demand of 3000 kW or greater to take delivery service on the 3000 kW Demand Rate G-62 (subject to the settlement provisions in Docket No. 2290). This paragraph shall not apply to delivery service taken under the Residential Storage Heating Rate E-30 or the Storage Cooling Rate E-40. For purposes of determining the customer's Demand, delivery service taken under rates E-30 and E-40 shall be excluded. Delivery service can be taken on a voluntary basis under this rate by customers who do not meet the minimum size requirements in this paragraph, provided however, that customers required to take delivery service under the 3000 kW Demand Rate G-62 shall take service under that tariff.  If any electricity is delivered hereunder at a given location, then all electricity deliveries by the Company at such location shall be delivered hereunder, except for delivery service taken under rate E-30 or E-40.

Notes: Reflects application of Gross Earnings Tax.

Notes:

Adjusted rates to remove New Jersey State Sales and Use Tax .

	Residential	Small C&I	Medium C&I	Large C&I
2003 Average Usage				
Billing Demand (kW)	0.0	5.9	50.9	554.7
Total kWh	671	1,328	16,627	228,957
Hrs. Use		225	327	413

NEW JERSEY	Distribution Rates	Bill Calculations

Atlantic Cit	y Electric Co.					RS	MGS	AGS	AGS		RS		MGS		AGS		AGS
JULY 2004		RES	SM C&I	MED C&I	LG C&I			1200									
Customer Charge:						\$2.33	\$4.49	\$87.22	\$87.22		\$2.33		\$4.49		\$87.22		\$87.22
Summer (June through Septe	mber)																
	First kWh	750	300	16,797	183,051	\$0.030636	\$0.041485	\$0.002455	\$0.002455	671	\$20.56	300	\$12.45	16,627	\$40.82	183,051	\$449.39
	Next kWh	0	900	82,500	82,500		\$0.025766	\$0.002485	\$0.002485	0	\$0.00	900	\$23.19	0	\$0.00	45,906	\$114.08
	Excess kWh					\$0.033965	\$0.023070	\$0.002455	\$0.002455	0	\$0.00	128	\$2.95	0	\$0.00	0	\$0.00
Winter (October through Ma	/)																
	First kWh	500	300	16,797	183,051	\$0.030619	\$0.041551	\$0.002455	\$0.002455	500	\$15.31	300	\$12.47	16,627	\$40.82	183,051	\$449.39
	Next kWh	0	900	82,500	82,500		\$0.021017	\$0.002485	\$0.002485	0	\$0.00	900	\$18.92	0	\$0.00	45,906	\$114.08
	Excess kWh					\$0.025772	\$0.021017	\$0.002455	\$0.002455	171	\$4.41	128	\$2.69	0	\$0.00	0	\$0.00
DEMAND																	
Summer	First kW		3	25	25		\$0.00	\$0.20	\$0.20			3.0	\$0.00		\$5.00		\$5.00
	Next kW		0	875	875			\$5.02	\$5.02			0.0	\$0.00	25.9	\$130.02	529.7	\$2,659.09
	Excess kW			9,100	9,100		\$4.32	\$5.00	\$5.00			2.9	\$12.53		\$0.00	0.0	\$0.00
Winter	First kW		3	25	25		\$0.00	\$0.20	\$0.20			3.0	\$0.00	25.0	\$5.00		\$5.00
	Next kW		0	875	875			\$5.02	\$5.02			0.0	\$0.00	25.9	\$130.02	529.7	\$2,659.09
	Excess kW			9,100	9,100		\$3.54	\$5.00	\$5.00			2.9	\$10.27		\$0.00	0.0	\$0.00
TOTAL WINTER											\$22.05		\$48.84		\$263.06		\$3,314.78
TOTAL SUMMER											\$22.89		\$55.61		\$263.06		\$3,314.78
EFFECTIVE ANNUAL											\$22.33		\$51.10		\$263.06		\$3,314.78
EFFECTIVE RATE											3.328		3.848		1.582		1.448

Rate	Description	<u>Availability</u>
RS	Residential Service	Available for full domestic service to individually metered residential customers, including rural domestic customers, engaged primarily in agricultural pursuits.
MGS	Monthly General Service - Secondary	Available at any point of the Company's system where facilities of adequate character and capacity exist for the entire electric service requirements of any customer delivered at one point and metered at or compensated to the voltage of delivery. This schedule is not available to residential customers.
AGS	Annual General Service - Secondar	y Available at any point of Company's system where facilities of adequate character and capacity exist for the entire electric service requirements of any customer contracting for annual service delivered at one point and metered at or compensated to the voltage of delivery.
AGS	Annual General Service - Secondar	y Available at any point of Company's system where facilities of adequate character and capacity exist for the entire electric service requirements of any customer contracting for annual service delivered at one point and metered at or compensated to the voltage of delivery.

Adjusted rates to include Remediation Adjustment Factor (per Rider RAC), Uncollectible Accounts Charge (per Rider UNC) and Transitional Energy Facility Assessment (per Rider TEFA).

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid Docket No. DTE 06-Exhibit SMM-2 Page 16 of 28

	Residential	Small C&I	Medium C&I	Large C&I
2003 Average Usage				
Billing Demand (kW)	0.0	5.9	50.9	554.7
Total kWh	671	1,328	16,627	228,957
Hrs. Use		225	327	413

NEW JERSEY	Distribution Rates	Bill Calculations

										I						
Jersey Central P	ower & Lig	ht				RS	GS	GS	GS	RS		SS		GS		GS
JULY 2004		RES	SM C&I	MED C&I	LG C&I				<750kW							
Customer Charge:						\$2.05	\$3.03	\$10.88	\$10.88	\$2.05		\$3.03		\$10.88		\$10.88
Summer (June through Septemb	per)															
	First kWh	600	1,000	1,000	1,000	\$0.016695	\$0.054390	\$0.054390	\$0.054390	600 \$10.02	1,000	\$54.39	1,000	\$54.39	1,000	\$54.39
	Excess kWh					\$0.056407	\$0.007129	\$0.007129	\$0.007129	71 \$4.00	328	\$2.34	15,627	\$111.40	227,957	\$1,625.11
Winter (October through May)																
	First kWh	1,000	1,000	1,000	1,000	\$0.025273	\$0.050552	\$0.050552	\$0.050552	671 \$16.96	1,000	\$50.55	1,000	\$50.55	1,000	\$50.55
	Excess kWh					\$0.025273	\$0.007129	\$0.007129	\$0.007129	0 \$0.00	328	\$2.34	15,627	\$111.40	227,957	\$1,625.11
DEMAND																
Summer	First kW		10	10	10		\$0.00	\$0.00	\$0.00		5.9	\$0.00	10.0	\$0.00	10.0	\$0.00
	Excess kW						\$5.76	\$5.76	\$5.76		0.0	\$0.00	40.9	\$235.58	544.7	\$3,137.47
Winter	First kW		10	10	10		\$0.00	\$0.00	\$0.00		5.9	\$0.00	10.0	\$0.00	10.0	\$0.00
	Excess kW						\$5.36	\$5.36	\$5.36		0.0	\$0.00	40.9	\$219.22	544.7	\$2,919.59
TOTAL WINTER										\$19.01		\$55.92		\$392.05		\$4,606.13
TOTAL SUMMER										\$16.07		\$59.76		\$412.25		\$4,827.85
EFFECTIVE ANNUAL									·	\$18.03		\$57.20		\$398.78		\$4,680.04
EFFECTIVE RATE										2.687		4.307		2.398		2.044

<u>Rate</u> RS	<u>Description</u> Residential Service	Availability  Available for: (a) Individual Residential Structures; (b) separately metered residences in Multiple Residential Structures; (c) incidental use for not-residential purposes when included along with the residence; and/or (d) Auxiliary Residential Purposes whether metered separately from the residence or not. This Service Classification is optional for customers which elect to be billed hereunder rather than under Service Classification RT.
GS	General Service Secondary	Available for general service purposes at secondary voltages not included under Service Classifications RS, RT, RGT or GST.
GS	General Service Secondary	Available for general service purposes at secondary voltages not included under Service Classifications RS, RT, RGT or GST.
GS	General Service Secondary	Available for general service purposes at secondary voltages not included under Service Classifications RS, RT, RGT or GST.
Notes:	Adjusted rates to remove New Jers	sev State Sales and Use Tax.

Adjusted rates to include Remediation Adjustment Factor (per Rider RAC), Uncollectible Accounts Charge (per Rider UNC) and Transitional Energy Facility Assessment (per Rider TEFA).

	Residential	Small C&I	Medium C&I	Large C&I
2003 Average Usage				
Billing Demand (kW)	0.0	5.9	50.9	554.7
Total kWh	671	1,328	16,627	228,957
Hrs. Use		225	327	413

NEW JERSEY	Distribution Rates	Bill Calculations

Public Service Electric	c & Gas	S				RS	GLP	GLP	LPL	RS			GLP		GLP		LPL
JULY 2004		RES	SM C&I	MED C&I	LG C&I												
Customer Charge:						\$2.27	\$3.96	\$3.96	\$347.77		\$2.27		\$3.96		\$3.96		\$347.77
Summer (June through September)																	
	Total						\$0.009702	\$0.009702	\$0.000545			1,328	\$12.88	16,627	\$161.32	228,957	\$124.78
First	t kWh	600	2,300	2,300		\$0.027025				600 \$	16.22						
Exces	ss kWh					\$0.030846				71	\$2.19						
Winter (October through May)																	
	Total						\$0.004160	\$0.004160	\$0.000545			1,328	\$5.52	16,627	\$69.17	228,957	\$124.78
First	t kWh	600	2,300	2,300		\$0.034669				600 \$	20.80						
Exces	ss kWh					\$0.034669				71	\$2.46						
DEMAND																	
Summer Fir	rst kW		0	0	0		\$0.0000	\$0.0000	\$0.0000			0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Exce	ess kW						\$10.3935	\$10.3935	\$10.1859			5.9	\$61.32	50.9	\$529.03	554.7	\$5,650.12
Winter Fir	rst kW		0	0	0		\$0.0000	\$0.0000	\$0.0000			0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Exce	ess kW						\$3.6393	\$3.6393	\$3.0144			5.9	\$21.47	50.9	\$185.24	554.7	\$1,672.09
TOTAL WINTER			•					•		\$	25.53	•	\$30.95	•	\$258.37		\$2,144.64
TOTAL SUMMER										\$	20.68		\$78.16		\$694.31		\$6,122.67
EFFECTIVE ANNUAL			•		·	·		•	•	\$	23.91	•	\$46.69	•	\$403.68		\$3,470.65
EFFECTIVE RATE				, and the second				Ť			3.564	_	3.516	_	2.428		1.516

Rate RS	<u>Description</u> Residential Service	Availability  Delivery service for residential purposes. Customers may either purchase electric supply from a Third Party Supplier (TPS) or from Public Services Basic Generation Service default service as detailed in this rate schedule.
GLP	General Lighting and Power Servi	ce Delivery service for general purposes at secondary distribution voltages. Customers may either purchase electric supply from a Third Party Supplier (TPS) or from Public Services Basic Generation Service default service as detailed in this rate schedule.
GLP	General Lighting and Power Servi	ce Delivery service for general purposes at secondary distribution voltages. Customers may either purchase electric supply from a Third Party Supplier (TPS) or from Public Services Basic Generation Service default service as detailed in this rate schedule.
LPL	Large Power and Lighting Service	Delivery service for general purposes at secondary distribution voltages where the customer's measured peak demand exceeds 150 kilowatts in any month and also at primary distribution voltages. Customers may either purchase electric supply from a Third Party Supplier (TPS) or from Public Services Basic Generation Service default service as detailed in this rate schedule.

Rates listed in tariff do not include New Jersey State Sales and Use Tax.

Rates listed in tariff include Transitional Energy Facility Assessment.

Adjusted rates to include Amortization of Excess Depreciation Reserve Credit.

Notes:

	Residential	Small C&I	Medium C&I	Large C&I
2003 Average Usage	0.0	5.0	50.0	5547
Billing Demand (kW)	0.0	5.9	50.9	554.7
Total kWh	671	1,328	16,627	228,957
Hrs. Use		225	327	413

NEW JER	RSEY					Distribution Rates				Bill Calculations							
_																	
Rockland I	Electric Company	7				1	2	2	2		1		2		2		2
JULY 2004		RES	SM C&I	MED C&I	LG C&I	_	_	_	<1000kW						_		_
Customer Charge:						\$3.63	\$6.16	\$6.16	\$6.16		\$3.63		\$6.16		\$6.16		\$6.16
Summer (June through Se	ptember)																
	First kWh	250	4,920	4,920	4,920	\$0.023103	\$0.031830	\$0.031830	\$0.031830	250	\$5.78	1,328	\$42.27	4,920	\$156.60	4,920	\$156.60
	Excess kWh					\$0.029292	\$0.020650	\$0.020650	\$0.020650	421	\$12.33	0	\$0.00	11,707	\$241.75	224,037	\$4,626.36
Winter (October through I	May)																
	First kWh	250	4,920	4,920	4,920	\$0.023103	\$0.029122	\$0.029122	\$0.029122	250	\$5.78	1,328	\$38.67	4,920	\$143.28	4,920	\$143.28
	Excess kWh					\$0.031198	\$0.020650	\$0.020650	\$0.020650	421	\$13.13	0	\$0.00	11,707	\$241.75	224,037	\$4,626.36
DEMAND																	
Summer	First kW		5	5	5		\$0.00	\$0.00	\$0.00			5.0	\$0.00	5.0	\$0.00	5.0	\$0.00
	Excess kW						\$2.67	\$2.67	\$2.67			0.9	\$2.40	45.9	\$122.55	549.7	\$1,467.70
Winter	First kW		5	5	5		\$0.00	\$0.00	\$0.00			5.0	\$0.00	5.0	\$0.00	5.0	\$0.00
	Excess kW						\$2.30	\$2.30	\$2.30			0.9	\$2.07	45.9	\$105.57	549.7	\$1,264.31
TOTAL WINTER											\$22.54		\$46.90		\$496.76		\$6,040.11
TOTAL SUMMER											\$21.74		\$50.83		\$527.06		\$6,256.82
EFFECTIVE ANNUAL											\$22.27		\$48.21		\$506.86		\$6,112.35
EFFECTIVE RATE											3.319		3.630		3.048		2.670

<u>Rate</u> I	<u>Description</u> Service Classification No. 1	Availability  Sales and delivery of electric power provided by the Company or delivery of electric power supply provided by an electric generation supplier under the Company's Retail Access Program to residential customers. All service at each residence shall be taken through one meter. Service will also be furnished hereunder to a church and adjacent buildings (other than school buildings which substitute for public education), owned by the church and operated in conjunction therewith' provided, however, that if the buildings of any such church group are separated by a highway or by highways, then the electricity delivered to each group so separated shall not be combined with the electricity delivered to other buildings of the church group but shall be billed separately under this rate.
2	Service Classification No. 2	Sales and delivery of electric power provided by the Company or delivery of electric power supply provided by an electric generation supplier under the Company's Retail Access Program to general secondary or primary service customers. A customer taking primary service whose demand exceeds 1000 kW during any two of the previous twelve months shall not be eligible for this rate and shall be transferred to Service Classification No. 7. A customer so transferred shall only be eligible to transfer back to Service Classification No. 2 on the annual anniversary of the transfer to Service Classification No. 7 and only if said customer has not exceeded 1000 kW during any two of the previous twelve months. All service at one location shall be taken through one meter except that service under Special Provision B shall be separately metered.
2	Service Classification No. 2	Sales and delivery of electric power provided by the Company or delivery of electric power supply provided by an electric generation supplier under the Company's Retail Access Program to general secondary or primary service customers. A customer taking primary service whose demand exceeds 1000 kW during any two of the previous twelve months shall not be eligible for this rate and shall be transferred to Service Classification No. 7. A customer so transferred shall only be eligible to transfer back to Service Classification No. 2 on the annual anniversary of the transfer to Service Classification No. 7 and only if said customer has not exceeded 1000 kW during any two of the previous twelve months. All service at one location shall be taken through one meter except that service under Special Provision B shall be separately metered.
2	Service Classification No. 2	Sales and delivery of electric power provided by the Company or delivery of electric power supply provided by an electric generation supplier under the Company's Retail Access Program to general secondary or primary service customers. A customer taking primary service whose demand exceeds 1000 kW during any two of the previous twelve months shall not be eligible for this rate and shall be transferred to Service Classification No. 7. A customer so transferred shall only be eligible to transfer back to Service Classification No. 2 on the annual anniversary of the transfer to Service Classification No. 7 and only if said customer has not exceeded 1000 kW during any two of the previous twelve months. All service at one location shall be taken through one meter except that service under Special Provision B shall be separately metered.

Notes: Adjusted rates to remove New Jersey State Sales and Use Tax .

Rates listed in tariff include Transitional Energy Facility Assessment per Rider - TEFA.

For Large C&I time of day under SC-9 not required because not >1,500kW

Notes:

	Residential	Small C&I	Medium C&I	Large C&I
2003 Average Usage				
Billing Demand (kW)	0.0	5.9	50.9	554.7
Total kWh	671	1,328	16,627	228,957
Hrs. Use		225	327	413

NEW YORK	NEW YORK							Distribution Rates				Bill Calculations							
Consolidated Edison of NY					SC-1 SC-2 SC-9 SC-9			SC-1		SC-2	SC-9			SC-9					
JULY 2004	RES	SM C&I	MED C&I	LG C&I															
Customer Charge:					\$10.28	\$12.74	\$0.00	\$0.00	\$10.2	8	\$12.74		\$0.00		\$0.00				
Summer (June through September)																			
First kWh	250	900	15,000	15,000	\$0.041060	\$0.054700	\$0.010900	\$0.010900	250 \$10.2	7 900	\$49.23	15,000	\$163.50	15,000	\$163.50				
Next kWh	0	1,100	0	0		\$0.048700			0 \$0.0	0 428	\$20.84	0	\$0.00	0	\$0.00				
Excess kWh					\$0.046390	\$0.022600	\$0.010900	\$0.010900	421 \$19.5	3 0	\$0.00	1,627	\$17.73	213,957	\$2,332.13				
Winter (October through May)																			
Total																			
First kWh	250	900	15,000	15,000	\$0.041060	\$0.046500	\$0.010900	\$0.010900	250 \$10.2	7 900	\$41.85	15,000	\$163.50	15,000	\$163.50				
Next kWh	0	1,100	0	0	\$0.000000	\$0.040500	\$0.000000	\$0.000000	0 \$0.0	0 428	\$17.33	0	\$0.00	0	\$0.00				
Excess kWh					\$0.037630	\$0.013500	\$0.010900	\$0.010900	421 \$15.8	4 0	\$0.00	1,627	\$17.73	213,957	\$2,332.13				
DEMAND																			
Summer First kW			5	5			\$9.97	\$9.97		5.9	\$0.00	5.0	\$49.85	5.0	\$49.85				
Next kW			895	895			\$9.97	\$9.97		0.0	\$0.00	45.9	\$457.62	549.7	\$5,480.51				
Winter First kW			5	5			\$7.92	\$7.92		5.9	\$0.00	5.0	\$39.60	5.0	\$39.60				
Next kW			895	895			\$7.92	\$7.92		0.0	\$0.00	45.9	\$363.53	549.7	\$4,353.62				
TOTAL WINTER							•		\$36.3	9	\$71.92		\$584.36		\$6,888.85				
TOTAL SUMMER									\$40.0	8	\$82.81		\$688.70		\$8,025.99				
EFFECTIVE ANNUAL		•	•				•		\$37.6	2	\$75.55		\$619.14		\$7,267.90				
EFFECTIVE RATE		•	•				•		5.60	7	5.689		3.724		3.174				

Rate SC-1	Description Residential and Religious	Availability  Applicable to Use of Service for light, heat, and power, when supplied directly by the Company to any single-family dwelling or building or to any individual flat or apartment in a multiple-family dwelling or building or portion thereof occupied as the home, residence or sleeping place of the Customer or an employee of the Customer, or when supplied directly by the Company to any corporation or association organized and conducted in good faith for religious purposes, where such electric service is utilized exclusively in connection with such religious purposes, to a community residence, or to a post or hall owned or leased by a not-for-profit corporation that is a veterans' organization, subject to the Special Provisions hereof.
SC-2	General - Small	Applicable to Use of Service for light, heat, and power for general uses where the Customer's requirements do not exceed 10 kilowatts subject to the Common Provisions Applicable to Rate I and Rate II and the Special Provisions of this Service Classification.
SC-9	General - Large	Applicable to Use of Service for light, heat, and power where the Customer's initial requirements are expected to be in excess of 10 kilowatts subject to the Common Provisions Applicable to Rate I and Rate II and the Special Provisions of this Service Classification.
SC-9	General - Large	Applicable to Use of Service for light, heat, and power where the Customer's initial requirements are expected to be in excess of 10 kilowatts subject to the Common Provisions Applicable to Rate I and Rate II and the Special Provisions of this Service Classification.

	Residential	Small C&I	Medium C&I	Large C&I
2003 Average Usage				
Billing Demand (kW)	0.0	5.9	50.9	554.7
Total kWh	671	1,328	16,627	228,957
Hrs. Use		225	327	413

PENNSYLVANIA	Distribution Rates	Bill Calculations
-		

Duquesne Light (	Company					RS	GS/GM	GS/GM	GL	R	s	(	GS/GM		GS/GM		GL
JULY 2004		RES	SM C&I	MED C&I	LG C&I				<900kW								
Customer Charge:						\$6.38	\$9.07	\$9.07	\$719.38		\$6.38		\$9.07		\$9.07		\$719.38
	Total					\$0.030212			\$0.004474	671	\$20.27					228,957	\$1,024.35
	First kWh		550	550			\$0.026274	\$0.026274				550	\$14.45	550	\$14.45		
	Next kWh		750	750			\$0.024575	\$0.024575				750	\$18.43	750	\$18.43		
E	excess kWh						\$0.006637	\$0.006637				28	\$0.19	15,327	\$101.73		
DEMAND																	
	First kW		5	5	300		\$0.00	\$0.00	\$0.00			5.0	\$0.00	5.0	\$0.00	300.0	\$0.00
1	Excess kW						\$3.54	\$3.54	\$1.82			0.9	\$3.19	45.9	\$162.49	254.7	\$463.55
TOTAL											\$26.65		\$45.33		\$306.17		\$2,207.28
State Tax Adj. 1.234	45%						•	•		•	\$0.33		\$0.56		\$3.78		\$27.25
TOTAL WITH State Tax Adj.								Ť			\$26.98		\$45.89		\$309.95		\$2,234.53
EFFECTIVE RATE						·	•	•		•	4.021		3.456		1.864		0.976

<u>Rate</u> RS	<u>Description</u> Residential Service	Availability  Available to residential or combined residential and farm customers using the Company's standard low voltage service for lighting, appliance operation, and general household purposes and for commercial or profession activity where associated consumption represents less than 25% of the total monthly usage at the premise. Available only when supplied at 240 volt (or less) single phase service through a single meter directly by the Company to a single family dwelling or to an individual dwelling unit in a multiple dwelling structure. For the purposes of this rate, a dwelling unit is defined as one or more rooms arranged for the use of one or more individuals for shelter, sleeping, dining, and with permanent provisions for cooking and sanitation.
GS/GM	General Service Small and Medium	Available for all the standard electric service taken on a small or medium general service customer's premises for which a residential rate is not available.
GS/GM	General Service Small and Medium	Available for all the standard electric service taken on a small or medium general service customer's premises for which a residential rate is not available.

GL General Service Large Available of all the standard electric service taken on a customer's premises where the demand is not less than 300 kilowatts.

Notes: Reflects application of the state tax adjustment surcharge per Rider No. 10 - State Tax Adjustment.

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid Docket No. DTE 06-Exhibit SMM-2 Page 21 of 28

	Residential	Small C&I	Medium C&I	Large C&I
2003 Average Usage				
Billing Demand (kW)	0.0	5.9	50.9	554.7
Total kWh	671	1,328	16,627	228,957
Hrs. Use		225	327	413

PENNSYLVANIA	Distribution Rates	Bill Calculations
-		

Metropolitan Edison Comp	any				RS	GS	GS	GST	R	,		GS		GS		GST
JULY 2004	RES	SM C&I	MED C&I	LG C&I	KS	<400hrsuse	<400kW	GS1	K,	,		GS		GS		GSI
Customer Charge:	KES	SMCCI	WIED CUI	Locai	\$6.67	\$8.37	\$16.74	\$95.06		\$6.67		\$8.37		\$16.74		\$95.06
Tota	ı				\$0.030290		\$10.74	Ψ>3.00		20.32	225	Ψ0.57		Ψ10.74		Ψ)3.00
First kWl		2,000	2,000		70102027	\$0.035000	\$0.035000		****		1,328	\$46.48	2,000	\$70.00		
Excess kWl		_,	_,,,,,			\$0.007200	\$0.007200				0	\$0.00	8,180	\$58.90		
First hrs use	e	200	200			\$0.000000	\$0.000000				0	\$0.00	10,180	\$0.00		
Excess hrs use	e					\$0.006600	\$0.006600				0	\$0.00	6,447	\$42.55		
On-Peal	c			36%				\$0.003440							82,425	\$283.54
Off-Peal	c			64%				\$0.003440							146,532	\$504.07
DEMAND Total kW	7							\$4.02							554.7	\$2,229.89
First kW		5	5	300		\$0.00	\$0.00				5.0	\$0.00	5.0	\$0.00		
Excess kW	7					\$4.57	\$4.57				0.9	\$4.11	45.9	\$209.76		
TOTAL									\$	26.99		\$58.96		\$397.95		\$3,112.56
State Tax Adj. 1.3000%										\$0.35		\$0.77		\$5.17		\$40.46
TOTAL WITH State Tax Adj.										27.34		\$59.73		\$403.12		\$3,153.02
EFFECTIVE RATE										4.075		4.498		2.424		1.377

Rate RS	<u>Description</u> Residential Service Rate	Availability This Rate is available to Full Service and Delivery Service Residential Customers using the Company's standard, single phase service through a single meter including not more than 2,000 watts of non-residential connected load served through the same meter. All charges are applicable to Full Service Customers. All charges, excluding Generation and Transmission, are applicable to Delivery Service Customers.
GS	General Service Secondary Rate	Available to Full Service and Delivery Service Customers using electric service through a single delivery location for lighting, heating and/or power service. Secondary voltage shall be supplied to Customers at a single transformer location when load does not require transformer capacity in excess of 2,500 KVA. Transformers for capacity greater than 2,500 KVA, if available, may be provided, upon Customer request and at the optio of the Company. New Customers requiring transformer capacity in excess of 2,500 KVA and existing Customers whose load increases such that a transformer charge is required (over 2,500 KVA) shall be required to take untransformed service. All charges, excluding Generation and Transmission, are applicable to Delivery Service Customers.
GS	General Service Secondary Rate	Available to Full Service and Delivery Service Customers using electric service through a single delivery location for lighting, heating and/or power service. Secondary voltage shall be supplied to Customers at a single transformer location when load does not require transformer capacity in excess of 2,500 KVA. Transformers for capacity greater than 2,500 KVA, if available, may be provided, upon Customer request and at the optio of the Company. New Customers requiring transformer capacity in excess of 2,500 KVA and existing Customers whose load increases such that a transformer charge is required (over 2,500 KVA) shall be required to take untransformed service. All charges, excluding Generation and Transmission, are applicable to Delivery Service Customers.
GST	General Service Secondary - Time- of-Day Rate	Available to Full Service and Delivery Service Customers using electric service through a single delivery location for lighting, heating, and/or power service whose registered demand is equal to or greater than 400 kW two (2) consecutive months. Secondary voltage shall be supplied to Customers at a single transformer location when load does not require transformer capacity in excess of 2,500 KVA. Transformers for capacity greater than 2,500 KVA, if available, may be provided, upon Customer request and at the option of the Company. New Customers requiring transformer capacity in excess of 2,500 KVA and existing Customers whose load increases such that a transformer charge is required (over 2,500 KVA) shall be required to take untransformed service. All charges, excluding Generation and Transmission, are applicable to Delivery Service Customers.
Notes:	Peak split = 12/24*5/7	

Notes: Peak split = 12/24\*5/7

Reflects application of the state tax adjustment surcharge per Rider A - Tax Adjustment Surcharge.

	Residential	Small C&I	Medium C&I	Large C&I
2003 Average Usage				
Billing Demand (kW)	0.0	5.9	50.9	554.7
Total kWh	671	1,328	16,627	228,957
Hrs. Use		225	327	413

PENNSYLVANIA	Distribution Rates	Bill Calculations
-		

PECO Energy																
<u></u>					R	GS	GS	GS	F			GS		GS		GS
JULY 2004	RES	SM C&I	MED C&I	LG C&I												
Customer Charge:					\$5.18	\$8.81	\$8.81	\$23.82		\$5.18		\$8.81		\$23.82		\$23.82
Summer (June through September)																
Total																
First kWh	500				\$0.044200				500	22.10						
Excess kWh					\$0.051300				171	\$8.77						
First hrs use		80	80	80		\$0.034300	\$0.034300	\$0.034300			472	\$16.19	4,072	\$139.67	44,376	\$1,522.10
Next hrs use		80	80	80		\$0.016100	\$0.016100	\$0.016100			472	\$7.60	4,072	\$65.56	44,376	\$714.45
Excess hrs use				0		\$0.010200	\$0.010200	\$0.010200			384	\$3.92	8,483	\$86.53	133,128	\$1,357.91
Over X hu + Y				400		\$0.004500	\$0.004500	\$0.004500						\$0.00	7,077	\$31.85
Winter (October through May)																
Total					\$0.044200				671	29.66						
First hrs use		80	80	80		\$0.034300	\$0.034300	\$0.034300			472	\$16.19	4,072	\$139.67	44,376	\$1,522.10
Next hrs use											0	\$0.00	0	\$0.00	0	\$0.00
Excess hrs use				0		\$0.010200	\$0.010200	\$0.010200			856	\$8.73	12,555	\$128.06	177,504	\$1,810.54
Over X hu + Y				400		\$0.004500	\$0.004500	\$0.004500				\$0.00		\$0.00	7,077	\$31.85
DEMAND Total kW											5.9	\$0.00	50.9	\$0.00	554.7	\$0.00
TOTAL WINTER									5	34.84		\$33.73		\$291.55		\$3,388.31
TOTAL SUMMER									5	36.05		\$36.52		\$315.58		\$3,650.13
EFFECTIVE ANNUAL										35.24		\$34.66		\$299.56		\$3,475.58
State Tax Adj0.3500%									(1	\$0.12)		(\$0.12)		(\$1.05)		(\$12.16)
EFFECTIVE ANNUAL WITH State Tax. A	dj.									35.12		\$34.54		\$298.51		\$3,463.42
EFFECTIVE RATE										5.234		2.601		1.795		1.513

<u>Rate</u> R	<b>Description</b> Residence Service	Availability  Single-phase service in the entire territory of the Company to the dwelling and appurtenances of a single private family (or to a multiple dwelling unit building consisting of two to five dwelling units, whether occupied not), for the domestic requirements of its members when such a service is supplied through one meter. Service is also available for related farm purposes when such service is supplied through one meter in conjunction with the farmhouse domestic requirements. The term "residence service" includes service to: (a) the separate dwelling unit in an apartment house or condominium, but not the halls, basement, or other portions of such building common to more than one such unit; (b) the premises occupied as the living quarters of five persons or less who unite to establish a common dwelling place for their own personal comfort and convenience on a cost-sharing basis; (c) the premises owned by a church, and primarily designated or set aside for, and actually occupied and used as, the dwelling place of a priest, rabbi, pastor, rector, nun or other functioning Chuch Divine, and the resident associates;  (d) private dwellings in which a portion of the space is used for the conduct of business by a person residing therein; (e) farm purpose uses by an individual employing the natural processes of growth for the production of grain, stock, dairy, poultry, garden truck, or other agricultural products.						
GS	General Service	Service through a single metering installation for offices, professional, commercial or industrial establishments, governmental agencies, and other applications outside the scope of the Residence Service rate schedules.						
GS	General Service	Service through a single metering installation for offices, professional, commercial or industrial establishments, governmental agencies, and other applications outside the scope of the Residence Service rate schedules.						
GS	General Service	Service through a single metering installation for offices, professional, commercial or industrial establishments, governmental agencies, and other applications outside the scope of the Residence Service rate schedules.						
Notes:	Reflects application of the state tax adjustment surcharge per State Tax Adjustment clause.							

	Residential	Small C&I	Medium C&I	Large C&I
2003 Average Usage				
Billing Demand (kW)	0.0	5.9	50.9	554.7
Total kWh	671	1,328	16,627	228,957
Hrs. Use		225	327	413

PENNSYLVANIA	Distribution Rates	Bill Calculations
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Pennsylvania El	ectric Compa	nnv				RS	GS	GS	GST	RS	,		GS		GS		GST
JULY 2004	•	RES	SM C&I	MED C&I	LG C&I	KS	GS	<400hrsuse	GS1	K	,		GS		GS		GS1
Customer Charge:		KES	SMCCI	MEDCAI	LGC&I	\$6.81	\$8.42	\$16.56	\$60.98		\$6.81		\$8.42		\$16.56		\$60.98
Customer Charge:	Total					\$0.02973	\$6.42	\$10.30	\$00.98		19.95		30.42		\$10.50		\$60.98
	First kWh		2,000	2,000		ψ0.02713	\$0.03050	\$0.03050		0/1 φ	17.75	1,328	\$40.50	2,000	\$61.00		
	Next kWh		1,180	8,180			\$0.01780					0	\$0.00	8,180	\$145.60		
	Excess kWh		,	.,			\$0.01100	-				0	\$0.00	6,447	\$70.92		
	On-Peak				36%				\$0.00026					0	\$0.00	82,425	\$21.43
	Off-Peak				64%				\$0.00006					0	\$0.00	146,532	\$8.79
DEMAND	Total kW								\$5.44							554.7	\$3,017.57
	Total kVAR	PF =	100%	100%	100%		\$0.312	\$0.312	\$0.312			5.9	\$1.84	50.9	\$15.88	554.7	\$173.07
	First kW		5	5	300		\$0.00	\$0.00				5.0	\$0.00	5.0	\$0.00		
	Excess kW						\$1.89	\$1.89				0.9	\$1.70	45.9	\$86.75		
TOTAL										\$	26.76		\$52.46		\$396.71		\$3,281.84
State Tax Adj.	1.4200%										\$0.38		\$0.74		\$5.63		\$46.60
TOTAL WITH State Tax Ad	ij.										27.14		\$53.20		\$402.34		\$3,328.44
EFFECTIVE RATE											4.045	_	4.006		2.420		1.454

<u>Rate</u> RS	<u>Description</u> Residential Service Rate	Availability  This Rate is available to Full Service and Delivery Service Residential Customers using the Company's standard, single phase service through a single meter including not more than 2,000 watts of non-residential connected load served through the same meter. All charges are applicable to Full Service Customers. All charges, excluding Generation and Transmission, are applicable to Delivery Service Customers.
GS	General Service Secondary Rate	Available to Full Service and Delivery Service Customers using electric service through a single delivery location for lighting, heating and/or power service. Secondary voltage shall be supplied to Customers at a single transformer location when load does not require transformer capacity in excess of 2,500 KVA. Transformers for capacity greater than 2,500 KVA, if available, may be provided, upon Customer request and at the optio of the Company. New Customers requiring transformer capacity in excess of 2,500 KVA and existing Customers whose load increases such that a transformer charge is required (over 2,500 KVA) shall be required to take untransformed service. All charges, excluding Generation and Transmission, are applicable to Delivery Service Customers.
GS	General Service Secondary Rate	Available to Full Service and Delivery Service Customers using electric service through a single delivery location for lighting, heating and/or power service. Secondary voltage shall be supplied to Customers at a single transformer location when load does not require transformer capacity in excess of 2,500 KVA. Transformers for capacity greater than 2,500 KVA, if available, may be provided, upon Customer request and at the optio of the Company. New Customers requiring transformer capacity in excess of 2,500 KVA and existing Customers whose load increases such that a transformer charge is required (over 2,500 KVA) shall be required to take untransformed service. All charges, excluding Generation and Transmission, are applicable to Delivery Service Customers.
GST	General Service Secondary - Time of-Day Rate	- Available to Full Service and Delivery Service Customers using electric service through a single delivery location for lighting, heating, and/or power service whose registered demand is equal to or greater than 400 kW two (2) consecutive months. Secondary voltage shall be supplied to Customers at a single transformer location when load does not require transformer capacity in excess of 2,500 kVA. Transformers for capacity greater than 2,500 kVA, if available, may be provided, upon Customer request and at the option of the Company. New Customers requiring transformer capacity in excess of 2,500 kVA and existing Customers whose load increases such that a transformer charge is required (over 2,500 kVA) shall be required to take untransformed service. All charges, excluding Generation and Transmission, are applicable to Delivery Service Customers.
Notes:		PF=100%), Medium C&I < 400 hrs use adjustment surcharge per Rider A - Tax Adjustment Surcharge.

	Residential	Small C&I	Medium C&I	Large C&I
2003 Average Usage				
Billing Demand (kW)	0.0	5.9	50.9	554.7
Total kWh	671	1,328	16,627	228,957
Hrs. Use		225	327	413

	PENNSYLVANIA		Distribution Rates	Bill Calculations
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	PennPower					RS	GS	GM	GM		RS		GS		GM		GM
JULY 2004		RES	SM C&I	MED C&I	LG C&I		<50kW										
Customer Charge:						\$8.89	\$14.44				\$8.89		\$14.44				
	Total					\$0.02329				671	\$15.63						
DEMAND	Total kW							\$2.774	\$2.774					50.9	\$141.20	554.7	\$1,538.74
	First kW		3				\$0.000					3.0	\$0.00				
	Excess kW						\$4.361					2.9	\$12.65				
TOTAL											\$24.52		\$27.09		\$141.20		\$1,538.74
State Tax Adj.	1.2800%										\$0.31		\$0.35		\$1.81		\$19.70
TOTAL WITH State	e Tax Adj.										\$24.83		\$27.44		\$143.01		\$1,558.44
EFFECTIVE RATE											3.700		2.066		0.860		0.681

Rate RS	<u>Description</u> Residential Service	Availability  Available for residential service, to installations served through one meter for each family unit in a residence or apartment. When service is used through the same meter for both residential and commercial purposes the General Service rate shall apply. This rate schedule is not available for commercial, institutional or industrial establishments.						
GS	General Service - Small	Available for service through a single metering installation for secondary light and power service for loads up to but not including 50 kW.						
GM	General Service - Medium	Available for secondary light and power service for loads of 50 kVA or greater. The billing load as hereinafter defined shall not be less than 50 kVA.						
GM	General Service - Medium	Available for secondary light and power service for loads of 50 kVA or greater. The billing load as hereinafter defined shall not be less than 50 kVA.						
Notes:	Reflects application of the state tax adjustment surcharge per Rider A - State Tax Adjustment Surcharge.  Adjusted residential rate to include Universal Service Charge per Universal Service Charge Rider.							

	Residential	Small C&I	Medium C&I	Large C&I
2003 Average Usage				
Billing Demand (kW)	0.0	5.9	50.9	554.7
Total kWh	671	1,328	16,627	228,957
Hrs. Use		225	327	413

PENNSYLVANIA Distribution Rates Bill Calculations

Pennsylvania Power & Light			RS	GS-1	GS-1	GS-3	RS	GS-1	GS-1	GS-3		
JULY 2004	RES	SM C&I	MED C&I	LG C&I	110	GD 1	G5 1	GD C	110	001	0.5.1	0.00
Customer Charge:					\$6.47	\$7.48	\$7.48	\$0.00	\$6.47	\$7	48 \$7.48	\$0.00
First kWh	200				\$0.01786				200 \$3.57			
Next kWh	600				\$0.01584				471 \$7.46			
Excess kWh					\$0.01462							
First hrs use		150	150	200		\$0.01903	\$0.01903	\$0.00141		885 \$16	84 7,635 \$145.29	110,940 \$156.43
Next hrs use		0	0	200				\$0.00109		0 \$0	00 0 \$0.00	110,940 \$120.92
Excess hrs use						\$0.01427	\$0.01427	\$0.00104		443 \$6	32 8,992 \$128.32	7,077 \$7.36
DEMAND												
First kW		5	5	5		\$0.00	\$0.00	\$2.84		5.0 \$0	00 5.0 \$0.00	5.0 \$14.20
Excess kW						\$1.86	\$1.86	\$2.84		0.9 \$1	67 45.9 \$85.33	549.7 \$1,561.15
TOTAL									\$17.50	\$32	31 \$366.40	\$1,860.06
State Tax Adj. 1.1000%									\$0.19	\$0	36 \$4.03	
TOTAL WITH State Tax Adj.									\$17.69	\$32	67 \$370.49	
EFFECTIVE RATE									2.636	2.4	60 2.228	0.821

Rate RS	<u>Description</u> Residential Service	Availability The Rate Schedule is for single phase residential service in accordance with the Applications Provisions hereof.
GS-1	Small General Service at Secondar	This Rate Schedule is for small general service at secondary voltage or at a higher available voltage at the option of the customer.
GS-1	Small General Service at Secondar	This Rate Schedule is for small general service at secondary voltage or at a higher available voltage at the option of the customer.
GS-3	Large General Service at Secondar Voltage or Higher	This Rate Schedule is for large general service at secondary voltage, or at a higher available voltage at the option of the customer. Where necessary, the Company furnishes and maintains one transformation from line voltage to a lower Company standard service voltage. However, service from a 69,000 volt line or higher is supplied at not less than 2,300 volts.
Notes:	Reflects application of the state tax	adjustment surcharge per State Tax Adjustment rider.

	Residential	Small C&I	Medium C&I	Large C&I		
2003 Average Usage						
Billing Demand (kW)	0.0	5.9	50.9	554.7		
Total kWh	671	1,328	16,627	228,957		
Hrs. Use		225	327	413		

Bill Calculations	Distribution Rates		PENNSYLVANIA
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UGI					n	65.4	00.4					G5.4		65.4		
WW VI 2004	P.P.C	G1. G G T	1.000 001		R	GS-4	GS-4	LP		R		GS-4		GS-4		LP
JULY 2004	RES	SM C&I	MED C&I	LG C&I		>5 kW										
Customer Charge:					\$5.50			\$135.80		\$5.50						\$135.80
First kW	h 500	2,000	2,000	2,000	\$0.03165				500	\$15.83						
Next kW	h 500	0	0	0	\$0.02684				171	\$4.59						
Excess kW	h				\$0.01971				0	\$0.00						
First hrs us	e	200	200	100		\$0.03033	\$0.03033	\$0.01696			1,180	\$35.79	10,180	\$308.76	55,470	\$940.77
Next hrs us	e	300	300	200		\$0.02303	\$0.02303	\$0.01518			148	\$3.41	6,447	\$148.47	110,940	\$1,684.07
Excess hrs us	e					\$0.02031	\$0.02031	\$0.01383			0	\$0.00	0	\$0.00	62,547	\$865.03
DEMAND																
First kW	7	20	20	100		\$3.59	\$3.59	\$0.00			5.9	\$21.18	20.0	\$71.80	100.0	\$0.00
Next kV	V	0	0	400				\$0.94			0.0	\$0.00	0.0	\$0.00	400.0	\$376.00
Excess kV	V					\$1.30	\$1.30	\$0.69			0.0	\$0.00	30.9	\$40.17	54.7	\$37.74
TOTAL										\$25.92		\$60.38		\$569.20		\$4,039.41
State Tax Adj. 1.3800%										\$0.36		\$0.83		\$7.85		\$55.74
TOTAL WITH State Tax Adj.										\$26.28		\$61.21	•	\$577.05		\$4,095.15
EFFECTIVE RATE										3.917		4.609		3.471		1.789

Rate R	<u>Description</u> Residential Service	Availability  Available to Customers located on the Company's distribution lines and desiring service for household and non-residential uses (where the non-residential use(s) is limited to less than 2 kW) in a single private dwelling, or an individual dwelling in a multiple dwelling structure, and its appurtenant detached buildings.							
GS-4	General Service (5 kW minimum)	Available to Customers located on Company's distribution lines desiring electric service for general lighting and/or power service whose minimum billing demand is not less than five (5) kilowatts.							
GS-4	General Service (5 kW minimum)	Available to Customers located on Company's distribution lines desiring electric service for general lighting and/or power service whose minimum billing demand is not less than five (5) kilowatts.							
LP	Large Power Service	Available to Customers taking general light and power service at each delivery point and whose minimum demand is not less than one hundred (100) kilowatts.							
Notes:	Reflects application of the state tax adjustment surcharge per tariff.								

Reflects application of the state tax adjustment surcharge per State Tax Adjustment Surcharge rider.

Notes:

	Residential	Small C&I	Medium C&I	Large C&I
2003 Average Usage				
Billing Demand (kW)	0.0	5.9	50.9	554.7
Total kWh	671	1,328	16,627	228,957
Hrs. Use		225	327	413

PENNSYLVANIA	Distribution Rates	Bill Calculations

WestP	Penn					10	20	20	30		10		20		20		30
JULY 2004		RES	SM C&I	MED C&I	LG C&I				>100kW								
Customer Charge:						\$5.00					\$5.00						
	Total					\$0.01874				671	\$12.57						
	First kWh		354	3,054	40,000		\$0.03113	\$0.03113	\$0.00704			354	\$11.02	3,054	\$95.07	40,000	\$281.60
	Next kWh		700	700			\$0.01470	\$0.01470				700	\$10.29	700	\$10.29		
	Next kWh		7,500	7,500			\$0.01332	\$0.01332				274	\$3.65	7,500	\$99.90		
	Excess kWh						\$0.01300	\$0.01300	\$0.00630			0	\$0.00	5,373	\$69.85	188,957	\$1,190.43
DEMAND	Total kW											5.9	\$0.00	50.9	\$0.00		
	First kW				100				\$0.98							100	\$98.00
	Excess kW								\$0.82							455	\$372.85
TOTAL											\$17.57		\$24.96		\$275.11		\$1,942.88
State Tax Adj. 0.	.0000%										\$0.00		\$0.00		\$0.00		\$0.00
TOTAL WITH State Tax Adj	j.										\$17.57		\$24.96		\$275.11		\$1,942.88
EFFECTIVE RATE											2.618		1.880		1.655		0.849

Rate 10	<u>Description</u> Domestic Service	Availability  Available for single-phase service to a single-family residence served through one meter.
20	General Service	Available for any purpose not included with the Availability of Schedule 10, Domestic Service, if all service at an establishment is supplied under this Schedule. Service shall not be available for Standby or Maintenance Service such as that required for Alternative Generation Facilities.
20	General Service	Available for any purpose not included with the Availability of Schedule 10, Domestic Service, if all service at an establishment is supplied under this Schedule. Service shall not be available for Standby or Maintenance Service such as that required for Alternative Generation Facilities.
30	General Power Service	Available for any purpose for loads totaling over 100 kilowatts at an establishment when all service at the establishment is served under this Schedule. Connections made before October 14, 1966, shall be for loads greater than 50 kilowatts. Loads over 1,500 kilowatts connected after August 28, 1985, will be served at voltages greater than 1,000 volts. Service shall not be available for Standby or Maintenance Service such as that required for Alternative Generation Facilities. An Electric Service Agreement shall be executed.

Residential Regular

& Industrial

General Service - Demand

R1

G1

G2

G3

	Residential	Small C&I	Medium C&I	Large C&I
2003 Average Usage				
Billing Demand (kW)	0.0	5.9	50.9	554.7
Total kWh	671	1,328	16,627	228,957
Hrs. Use		225	327	413

**Bill Calculations** 

Massachusetts Electric					R1	G1	G2	G3		R1		G1		G2		G3
JULY 2004	RES	SM C&I	MED C&I	LG C&I												
Customer Charge:					\$5.81	\$8.32	\$15.23	\$67.27		\$5.81		\$8.32		\$15.23		\$67.27
Tot	al				\$0.02493	\$0.03834	\$0.00129		671	\$16.73	1,328	\$50.92	16,627	\$21.45		
First kW	'h								671	\$0.00	1,328	\$0.00	16,627	\$0.00		
On-Pea	ık			46%				\$0.01174							105,320	\$1,236.46
Off-Pea	ık			54%				-\$0.00009							123,637	-\$11.13
DEMAND Total k	V						\$5.92	\$3.63					50.9	\$301.33	554.7	\$2,013.56
TOTAL										\$22.54		\$59.24		\$338.01		\$3,306.16
EFFECTIVE RATE										3.359		4.461		2.033		1.444

**Distribution Rates** 

Electric delivery service under this rate is available for all domestic purposes in an individual private dwelling or an individual apartment and for church and farm purposes. The Company may under unusual circumstances permit more than one set of living quarters to be served through one meter under this rate, but if so, the Customer Charge shall be multiplied by the number of separate living quarters so served. A church and adjacent buildings owned and operated by the church may be served under this rate, but any such buildings separated by public ways must be billed separately. Customers whose average monthly usage for the previous 12 months exceeds 2500 kWh per month may elect delivery service on rate R-4, subject to the availability of the appropriate metering equipment.

General Service - Small Commercial Electric delivery service under this rate is available for all purposes, subject to the provisions of this section. A new Customer will begin service on this rate if the Company estimates that its average use will not exceed 10,000 kWh/month or 200 kW of demand. A Customer may be transferred from rate G-1 at its request or at the option of the Company if the Customer's 12 month average monthly usage exceeds either 10,000 kWh/month or 200 kW of demand for 3 consecutive months. A Municipality which owns and maintains streetlight fixtures served by underground conduit may take delivery service under the unmetered service provision of this rate if the Municipality signs an Underground Electric Service for Non-Conforming Streetlighting Contract with the Company for underground electric delivery service for streetlighting.

> Electric delivery service under this rate is available for all purposes, subject to the provisions of this section. A new customer will begin delivery on this rate if the Company estimates that its average use will exceed 10,000 kWh/month, but not exceed 200 kW of Demand. In addition, from May 1, 2000 through February 28, 2005, this rate shall be available to customers taking service under the former Eastern Edison Company General Service Rate G-2 as of December 31, 1999 that otherwise would qualify to take service only under the Company's Small Commercial and Industrial Rate G-1, in accordance with the Company's Individual Customer Protection Provision, M.D.T.E. No. 1030. A Customer may be transferred from rate G-2 at its request if the customer's 12 month average monthly usage either (a) is less than 8,000 kWh/month or (b) exceeds 200 kW of Demand for 3 consecutive months. A Customer may be transferred at the option of the Company if the Customer's 12 month average usage either (a) is less than 8,000 kWh/month or (b) exceeds 200 kW of Demand for 3 consecutive months.

> Electric delivery service under this rate is available for all purposes, subject to the provisions of this section. A new Customer will begin delivery service on this rate if the Company estimates that its average use will exceed 200 kW of Demand. A Customer may be transferred from rate G-3 at its request if the customer's 12 month average monthly demand is less than 180 kW of Demand for 3 consecutive months. A Customer may be transferred from rate G-3 at the option of the Company if the Customer's 12 month average monthly demand is less than 180 kW of Demand for 3 consecutive months. The actual delivery of service and the rendering of bills under this rate is contingent upon the installation of the necessary time-of-use metering equipment by the Company; subject to both the availability of such meters from the Company's supplier and the conversion or installation procedures established by the Company. All Customers served on this rate must elect to take their total electric delivery service under the time-of-use metering installation as approved by the Company. If delivery is through one meter, except at the Company's option, the Monthly Charge for service through each meter shall be computed separately under this rate.

Notes: Peak split from load research = 46%

Time-of-Use

Adjusted rates to include the portion of the Customer Credit for the Exogenous Factor associated with Bonus Depreciation for the period ending December 2003 of (0.009¢) per kWh, pursuant to Section 2(e) of the Settlement Agreement in Docket Nos. DTE 02-79, DTE 03-124 and DTE 03-126.

MASSACHUSETTS ELECTRIC COMPANY
NANTUCKET ELECTRIC COMPANY
d/b/a NATIONAL GRID
Docket No. D.T.E. 06-\_\_\_
Witness: McCabe

## Exhibit SMM-3 July 1, 2005 Regional Index

Massachusetts Electric Company Nantucket Electric Company July 1, 2005 Regional Index

				DISTRIBUTION July 2005					
			% of Total						Weighted
Utility	State	Total 2003 MWh	MWh	Residential	Small C&I	Medium C&I	Large C&I	INDEX	Average
				R	G1	G2	G3		
Connecticut Light & Power Company	CT	24,116,876	7.5%	3.545	5.271	3.407	1.498	2.907	0.218
United Illuminating Company	CT	5,763,052	1.8%	4.933	5.151	3.299	1.775	3.512	0.063
Boston Edison Company (NSTAR)	MA	14,961,539	4.7%	4.917	5.549	4.066	2.867	4.071	0.189
Cambridge Electric Company (NSTAR)	MA	1,639,564	0.5%	3.580	2.545	2.047	1.111	2.318	0.012
Commonwealth Electric Company (NSTAR)	MA	4,173,545	1.3%	5.201	4.228	2.519	1.323	3.241	0.042
Fitchburg Gas & Electric Company (Unitil)	MA	515,669	0.2%	4.700	4.650	3.356	1.713	3.360	0.005
Western Massachusetts Electric Company (Northeast Utilities)	MA	4,023,433	1.3%	4.200	4.908	2.700	1.709	3.100	0.039
Bangor Hydro-Electric Company	ME	1,542,455	0.5%	5.420	4.688	2.658	2.341	3.777	0.018
Maine Public Service Company	ME	540,214	0.2%	4.747	4.153	2.262	1.639	3.146	0.005
Granite State Electric Company (National Grid)	NH	833,597	0.3%	4.317	3.826	1.741	1.221	2.717	0.007
New Hampshire Electric Cooperative Inc.	NH	690,095	0.2%	5.547	4.073	3.737	2.751	4.078	0.009
Unitil Energy Service, Inc.	NH	1,211,068	0.4%	3.021	3.561	2.091	1.366	2.306	0.009
Narragansett Electric Company (National Grid)	RI	7,964,092	2.5%	3.948	4.285	2.285	1.564	2.830	0.070
Atlantic City Electric Company (Conectiv Power Delivery)	NJ	9,642,644	3.0%	3.301	3.815	1.581	1.443	2.393	0.072
Jersey Central Power & Light Company (FirstEnergy)	NJ	20,859,480	6.5%	2.960	4.790	2.657	2.265	2.825	0.183
Public Service Electric & Gas Company	NJ	42,067,965	13.1%	3.564	3.516	2.428	1.516	2.613	0.342
Rockland Electric Company (Orange & Rockland)	NJ	1,563,289	0.5%	3.529	3.822	3.231	2.831	3.247	0.016
Consolidated Edison Company of New York	NY	43,362,087	13.5%	5.991	5.950	3.972	3.386	4.702	0.634
Duquesne Light Company	PA	13,363,091	4.2%	4.021	3.455	1.865	0.976	2.494	0.104
Metropolitan Edison Company (FirstEnergy)	PA	13,009,872	4.0%	4.072	4.495	2.423	1.376	2.845	0.115
PECO Energy	PA	36,841,017	11.5%	5.227	2.592	1.789	1.508	3.061	0.350
Pennsylvania Electric Company (FirstEnergy)	PA	13,400,384	4.2%	4.042	4.004	2.418	1.453	2.816	0.117
Pennsylvania Power Company (FirstEnergy)	PA	4,258,641	1.3%	3.706	2.069	0.861	0.682	1.986	0.026
Pennsylvania Power & Light Company	PA	35,417,470	11.0%	3.232	3.221	2.761	1.155	2.369	0.261
UGI Utilities, Inc.	PA	978,551	0.3%	3.920	4.614	3.474	1.790	3.108	0.009
West Penn Power Company (Allegheny Power)	PA	19,001,901	5.9%	2.620	1.880	1.656	0.849	1.734	0.102
Total MWh Included in Weighted Average		321.741.591	100.0%						
Mass. Electric Customer Mix		221,711,021	200.070	37.90%	9.52%	14.34%	38.24%	100.00%	

Weighted Average By kWh 3.017

## General Notes

- 1) PF =100% for rate calculations

- 1) PF = 100% for rate calculations
  2) Time of use splits are based on period definitions. (ie. if peak period=9am-9pm on weekdays, then peak split = 12/24 x 5/7)
  3) In all cases, the tariff selected is based on Massachusetts Electric Company average customers.
  4) In all cases, conservation charges not included.
  5) Residential and Small C&I assumed to be single phase/non-demand metered. Medium & Large C&I assumed to be three phase service, demand metered.
  6) Where Small C&I tariffs contained demand component, the Massachusetts Electric Company G1 average demand of 5.9 kW was used.
- 7) Hours use rates were calculated at average billing demand.

01/26/2006

	Residential	Small C&I	Medium C&I	Large C&I
2003 Average Usage				
Billing Demand (kW)	0.0	5.9	50.9	554.7
Total kWh	671	1,328	16,627	228,957
Hrs. Use		225	327	413

Bill Calculations

Connecticut l	Light & Power C	Co.				1	30	35	56	1		30		35	1	56
JULY 2005		RES	SM C&I	MED C&I	LG C&I											
Customer Charge:	,	<i>i</i> '	1 '	1 '	1 '	\$9.30	\$22.51	\$311.05	\$377.75	\$9.3	0	\$22.51		\$311.05	1	\$377.75
ĺ	Total	<i>l</i> '	1	1 '	1	\$0.02160	1	ı l	l I	671 \$14.4	.9				1	J
ĺ	First hrs use	. '	300	400	1 '		\$0.02595	\$0.00315	1 1		1,328	\$34.46	16,627	\$52.38	1	J
ĺ	Excess hrs use	1 '	1	'	1	<b>j</b>	\$0.00220	\$0.00000	i I		0	\$0.00	0	\$0.00	i	ŀ
ĺ	On-Peak	. '	1 '	1 '	48%		1 1	ı l	\$0.00537						109,899	\$590.16
	Off-Peak	'	1 '	<u>                                      </u>	52%		i l		\$0.00000						119,058	\$0.00
DEMAND	Total kW			1				\$3.99	\$4.44				50.9	\$203.09	554.7	\$2,462.87
ĺ	First kW	<i>i</i> '	2		1 '	1	\$0.00	ı l	1		2	\$0.00	,		1	
	Excess kW	'	1 '	<u> </u>	<u> </u>	<u> </u>	\$3.34				3.9	\$13.03	,			
TOTAL		'		<u> </u>	<u> </u>					\$23.7	9	\$70.00	,	\$566.52		\$3,430.78
EFFECTIVE RATE		<i></i> '		1						3.54	5	5.271		3.407		1.498

Distribution Rates

Rate 1	<u>Description</u> Residential Electric Service	Availability  Available for the entire electrical requirements of single-family residences, residential outbuildings, individual apartments, and general service use in apartment buildings, where residential use constitutes over 50 percent of the metered energy, and also available to farm customers.
30	Small General Electric Service	Available for the entire electrical requirements at a single service location where the customer's maximum demand is less that 350 kW. Where the Company deems it is impractical to deliver electricity through one service, or where more than one meter has been installed for billing under a withdrawn rate, then the measurement of electricity may be by two or more meters
35	Intermediate General Electric Service	Available for the electrical requirements where the customer's maximum demand is less than 350 KWh and delivered at one point and at one standard voltage through one installation of transformers supplied by the Company. Service will be metered at one point by one installation of meters. The meter location will be determined by the Company. Where the Company deems it impractical to deliver electricity through one service, or where one meter has been installed for billing under a withdrawn rate, then the measure of electricity may be by two or more meters.
56	Intermediate Time-of-Day Electric Service for Non-Manufacturers	Available for the electrical requirements of customers delivered at one point and at one standard voltage through one installation of transformers supplied by the Company. Service will be metered at one point by one installation of meters. The meter location will be determined by the Company. Where the Company deems it impractical to deliver electricity through one service, or where more than one meter has been installed for billing under a withdrawn rate, then the measure of electricity may be two or more meters.

Peak split = 16/24\*5/7 Notes:

For Large C&I chose rate for non-manufacturers as Massachusetts Electric has a larger proportion of non-manufacturers than manufacturers.

	Residential	Small C&I	Medium C&I	Large C&I
2003 Average Usage		cui	cui	car
Billing Demand (kW)	0.0	5.9	50.9	554.7
Total kWh	671	1,328	16,627	228,957
Hrs. Use		225	327	413

NEW ENGLAND Distribution Rates Bill Calculations

The United Illuminating Comp	oany				R	GS	GS	GST	R	GS		GS		GST
JULY 2005	RES	SM C&I	MED C&I	LG C&I		GD.	GD.	351		0.5		GD.		051
Customer Charge:		0			\$8.30	\$8.62	\$24.13	\$33.30	\$8.3	0 \$8.6	2	\$24.13		\$33.30
Summer (June through September)						,		,	,					,
Total						\$0.054253	\$0.028097			1,328 \$72.0	5 16,627	\$467.17		
First kWh	500				\$0.034471				500 \$17.2	4				
Excess kWh					\$0.063683				171 \$10.8	9				
On-Peak				24%				\$0.047437					54,950	\$2,606.66
Shoulder													0	\$0.00
Off-Peak				76%				\$0.007590					174,007	\$1,320.71
Winter (October through May)														
Total						\$0.040406	\$0.016564			1,328 \$53.6	6 16,627	\$275.41		
First kWh	500				\$0.034471				500 \$17.2	4				
Excess kWh					\$0.034471				171 \$5.8	9				
On-Peak				24%				\$0.029031					54,950	\$1,595.25
Shoulder													0	\$0.00
Off-Peak				76%				\$0.004744					174,007	\$825.49
DEMAND														
Summer On-Peak							\$4.79	\$2.85			50.9	\$243.81	554.7	\$1,580.90
Shoulder Excess											0.0	\$0.00	0.0	\$0.00
Off-Peak Excess							\$4.79	\$1.42			0.0	\$0.00	0.0	\$0.00
Winter On-Peak							\$3.06	\$1.57			50.9	\$155.75	554.7	\$870.88
Shoulder Excess											0.0	\$0.00	0.0	\$0.00
Off-Peak Excess							\$3.06	\$1.42			0.0	\$0.00	0.0	\$0.00
TOTAL WINTER									\$31.4			\$455.29		\$3,324.92
TOTAL SUMMER									\$36.4			\$735.11		\$5,541.57
EFFECTIVE ANNUAL									\$33.1			\$548.56		\$4,063.80
EFFECTIVE RATE									4.93	3 5.15	1	3.299		1.775

Rate R	<u>Description</u> Residential Rate	Availability  Service under this rate is for all normal residential requirements and qualifying veterans organizations, agricultural, campground and marina usage.
GS	General Service Rate	Service under this rate is for all requirements on a Customer's Premises, provided the Customer's demand does not exceed 500 kW in two consecutive months.
GS	General Service Rate	Service under this rate is for all requirements on a Customer's Premises, provided the Customer's demand does not exceed 500 kW in two consecutive months.
GST	General Service Time-of-Use Rate	Service under this rate is optional for all requirements on a Customers Premises, subject to the availability and installation of metering equipment.
Notes:	Peak split = 8/24*5/7 For Small C&I demand is not billed	as usage is less than 1560 kilowatt hours and demand is less than 8 kW.

	Residential	Small C&I	Medium C&I	Large C&I
2003 Average Usage				
Billing Demand (kW)	0.0	5.9	50.9	554.7
Total kWh	671	1,328	16,627	228,957
Hrs. Use		225	327	413

Distribution Rates Bill Calculations

								1						
				A1 (R-1)	A9 (G-1)	B2 (G-2)	B3 (T-2)	A1 (R-1)	A9 (0	G-1)	1	B2 (G-2)		B3 (T-2)
RES	SM C&I	MED C&I	LG C&I		<10	<u> </u>	, ,	, ,	,					1
				\$6.43	\$8.14	\$18.19	\$166.67	\$6.4	3	\$8.14		\$18.19		\$166.67
				\$0.03959	\$0.06802		\$0.00059	671 \$26.5	6 1,328 \$	90.33	16,627	\$0.00	228,957	\$135.08
		2,000				\$0.02195								
		150												
						\$0.00559					6,992	\$39.09		
				\$0.03959	\$0.04003		\$0.00059	671 \$26.5	6 1,328 \$	53.16			228,957	\$135.08
		2,000				\$0.01202								
		150												
						\$0.00510					6,992	\$35.66		
		10	0			60.00	¢17.51				10	60.00	0.0	\$0.00
		10	U											\$9,712.80
		10	0											\$9,712.80
		10	U											\$4,537.45
						37.43	30.10	\$32.0	0 4	61 30	40.7		334.7	\$4,839.20
														\$10,014.55
														\$6,564.32
												4.066		2.867
	RES	RES SM C&I	RES SM C&I MED C&I  2,000  39.3 150  2,000  39.3 150  10 10	2,000 39.3 150 2,000 39.3	RES SM C&I MED C&I LG C&I \$6.43 \$0.03959 2,000 39.3 150 \$0.03959 2,000 39.3	RES SM C&I MED C&I LG C&I \$6.43 \$8.14  \$0.03959 \$0.06802  2,000 \$0.03959 \$0.04003  2,000 \$0.03959 \$0.04003	RES SM C&I MED C&I LG C&I \$6.43 \$8.14 \$18.19  2,000 \$0.03959 \$0.06802 \$0.02195  39.3 150 \$0.03959 \$0.04003 \$0.00559  2,000 \$0.03959 \$0.04003 \$0.01202	RES SM C&I MED C&I LG C&I \$6.43 \$8.14 \$18.19 \$166.67  \$0.03959 \$0.06802 \$0.02195  39.3 \$0.00559  2,000 \$0.03959 \$0.04003 \$0.00559  \$0.00559  \$0.00059  \$0.00059  \$0.00059  \$0.00059  \$0.00059  \$0.00059	RES         SM C&I         MED C&I         LG C&I         \$6.43         \$18.19         \$166.67         \$6.4           \$0.03959         \$0.03959         \$0.06802         \$0.00195         \$0.00059         671         \$26.5           \$0.00870         \$0.00870         \$0.00599         \$0.00059         671         \$26.5           \$0.00970         \$0.000599         \$0.00059         671         \$26.5           \$0.00697         \$0.000510         \$0.00059         \$17.51           \$0.000         \$17.51         \$0.00059         \$17.51           \$0.000         \$0.000         \$17.51         \$0.00059         \$17.51           \$0.000         \$0.000         \$0.00059         \$0.00059         \$17.51         \$0.00059           \$0.000         \$0.000         \$0.00059	RES         SM C&I         MED C&I         LG C&I         \$6.43         \$18.19         \$166.67         \$6.43           2,000         \$0.03959         \$0.06802         \$0.00059         671         \$26.56         1,328         \$0.00195           39.3         150         \$0.03959         \$0.04003         \$0.00059         671         \$26.56         1,328         \$0.00059           39.3         150         \$0.00059         \$0.00059         671         \$26.56         1,328         \$0.00059           10         0         \$0.00059         \$0.00059         \$17.51         \$0.00059         \$0.0	RES         SM C&I         MED C&I         LG C&I         \$6.43         \$8.14         \$18.19         \$166.67         \$6.43         \$8.14           \$0.03959         \$0.03959         \$0.06802         \$0.00059         \$0.00059         671         \$26.56         1,328         \$90.33           \$0.00870         \$0.00870         \$0.00059         \$0.00059         671         \$26.56         1,328         \$53.16           \$0.00599         \$0.00059         \$0.00059         671         \$26.56         1,328         \$53.16           \$0.00697         \$0.00590         \$0.00059         671         \$26.56         1,328         \$53.16           \$0.00697         \$0.00510         \$0.00697         \$0.00510         \$0.00697         \$0.00510         \$0.00697         \$0.00510         \$0.00697 <td< td=""><td>RES         SM C&amp;I         MED C&amp;I         LG C&amp;I         \$6.43         \$18.19         \$166.67         \$6.43         \$8.14           2,000         \$0.03959         \$0.06802         \$0.00195         \$0.00059         671         \$26.56         1,328         \$90.33         16,627           2,000         39.3         \$0.00870         \$0.00870         \$0.00870         \$0.00870         \$0.00059         671         \$26.56         1,328         \$90.33         16,627         2,000         \$0.00059         671         \$26.56         1,328         \$53.16         16,627         \$0.000         \$0.000         \$0.00059         671         \$26.56         1,328         \$53.16         16,627         \$0.000         \$0.000         \$0.00059         671         \$26.56         1,328         \$53.16         16,627         \$0.000         <t< td=""><td>  RES</td><td>  RES</td></t<></td></td<>	RES         SM C&I         MED C&I         LG C&I         \$6.43         \$18.19         \$166.67         \$6.43         \$8.14           2,000         \$0.03959         \$0.06802         \$0.00195         \$0.00059         671         \$26.56         1,328         \$90.33         16,627           2,000         39.3         \$0.00870         \$0.00870         \$0.00870         \$0.00870         \$0.00059         671         \$26.56         1,328         \$90.33         16,627         2,000         \$0.00059         671         \$26.56         1,328         \$53.16         16,627         \$0.000         \$0.000         \$0.00059         671         \$26.56         1,328         \$53.16         16,627         \$0.000         \$0.000         \$0.00059         671         \$26.56         1,328         \$53.16         16,627         \$0.000 <t< td=""><td>  RES</td><td>  RES</td></t<>	RES	RES

Rate Al (R-1)	<u>Description</u> Residential	Availability  This rate is available for lighting, heating and other uses in residential premises, for service in an edifice set apart exclusively for public worship, condominium common area and cooperative apartment common areas excluding hotels and apartment buildings of ten or more dwelling units where the bills are not rendered by the Company directly to the individual tenants. This rate is closed for expansion to nursing homes. Service under this rate to any Customer is subject to both the Company's printed requirements and the Company's Terms and Conditions - Distribution Service, each as in effect from time to time.
A9 (G-1)	General	This rate is available for all non-residential uses of electricity to all Customers whose load for billing purposes does not exceed or is estimated to not exceed 10 kilowatts. Customers with a demand exceeding 12 kilowatts in any month will be placed on Rate G-2. Demand meters will be installed for all new customers with either: (a) three-phase service or (b) single-phase service exceeding 100 amperes. Service under this rate is subject to both the Company's printed requirements and the Company's Terms and Conditions - Distribution Service, each as in effect from time to time.
B2 (G-2)	General	Service under this rate is available for all use at a single location where the service voltage is less than 10,000 volts and the monthly demand is equal to or greater that 10 kilowatts. Rate G-2 Customers with demands less than 8 kilowatts for at least one year will be placed on Rate G-1. Rate G-2 Customers with a monthly demand equal or greater than 200 kW will be evaluated for transfer to Rate T-2. Additionally, all new Customers with a monthly demand equal or greater than 200 kW will be placed on Rate T-2. Service under this rate is subject to both the Company's printed requirements and the Company's Terms and Conditions - Distribution Service, each as in effect from time to time.
B3 (T-2)	Time of Use	Service under this rate is available for all use at a single location where the service voltage is less than 10,000 volts and the monthly demand is equal to or greater that 10 kilowatts. Customers with demands less than 150 kW will be evaluated for transfer to Rate G-2. Service under this rate is subject to both the Company's printed requirements and the Company's Terms and Conditions - Distribution Service, each as in effect from time to time.

Notes: Adjusted rates to include pension adjustment factor per tariff.

	Residential	Small C&I	Medium C&I	Large C&I
2003 Average Usage				
Billing Demand (kW)	0.0	5.9	50.9	554.7
Total kWh	671	1,328	16,627	228,957
Hrs. Use		225	327	413

Bill Calculations

Cambridge Electric					01 (R-1)	06 (G-0)	02 (G-1)	62 (G-2)	01 (R-1)		06 (G-0)		02 (G-1)		62 (G-2)
JULY 2005	RES	SM C&I	MED C&I	LG C&I											
Customer Charge:					\$6.87	\$4.62	\$7.32	\$90.00	\$6.8	7	\$4.62		\$7.32		\$90.00
Total					\$0.02556	\$0.02197	\$0.00937	\$0.00615	671 \$17.1	5 1,328	\$29.18	16,627	\$155.79	228,957	\$1,408.09
DEMAND															
First kW			10	100			\$0.87	\$1.09				10	\$8.70	100.0	\$109.00
Excess kW							\$4.12	\$2.06				40.9	\$168.51	454.7	\$936.68
TOTAL	•					, and the second	•		\$24.0	2	\$33.80		\$340.32		\$2,543.77
EFFECTIVE RATE									3.58	0	2,545		2.047		1.111

Distribution Rates

<u>Rate</u> 01 (R-1)	<u>Description</u> Residential	Availability  This rate is available for all domestic uses in a single private dwelling, in an individual apartment or in a residential condominium in which the principal means of heating the premises is not provided by permanently installed electric space heating equipment. Service under this rate to residential condominiums is available to the extent permitted by applicable regulations of the Massachusetts Department of Telecommunications and Energy. Service under this rate is subject to both the Company's printed requirements and the Company's Terms and Conditions - Distribution Service, each as in effect from time to time.
06 (G-0)	General (Non-Demand)	This rate is available for all non-residential uses of electricity to all Customers whose load for billing purposes does not exceed or is estimated not to exceed 10 kilowatts in any three (3) consecutive billing months. Service under this rate is subject to both the Company's printed requirements and the Company's Terms and Conditions - Distribution Service, each as in effect from time to time.
02 (G-1)	General	This rate is available for all non-residential uses of electricity to all Customers whose load for billing purposes is or is estimated to be greater than 10 kilowatts for three consecutive billing months but not greater than kilowatts in each of 12 consecutive billing months. Service under this rate is subject to both the Company's printed requirements and the Company's Terms and Conditions - Distribution Service, each as in effect from time to time.
62 (G-2)	Large General Time-of-Use Secondary Service	This rate is available for all of electricity to Customers whose metered load exceeds or is estimated to exceed 100 kilowatts for at least 12 consecutive billing months. Service under this rate is subject to both the Company's printed requirements and the Company's Terms and Conditions - Distribution Service, each as in effect from time to time.
Notes:	Adjusted rates to include pension Adjusted rates to remove the cred	adjustment factor per tariff. it that was implemented as a result of DTE 03-88 and is reflected in distribution charge per tariff.

	Residential	Small C&I	Medium C&I	Large C&I
2003 Average Usage				
Billing Demand (kW)	0.0	5.9	50.9	554.7
Total kWh	671	1,328	16,627	228,957
Hrs. Use		225	327	413

Bill Calculations

## NEW ENGLAND Distribution Rates

Commo	onwealth Electric					32 (R-1)	33 (G-1)	33 (G-1)	24 (G-3)		32 (R-1)		33 (G-1)		33 (G-1)		24 (G-3)
JULY 2005		RES	SM C&I	MED C&I	LG C&I	1	, í	` ′	` `		, ,						
Customer Charge:						\$3.73	\$5.53	\$5.53	\$900.00		\$3.73		\$5.53		\$5.53		\$900.00
Summer (June through	September)																
	Total					\$0.04645				671	\$31.17						
	First kWh		2,300	2,300			\$0.03812	\$0.03812				1,328	\$50.62	2,300	\$87.68		
	Excess kWh						\$0.00885	\$0.00885				0	\$0.00	14,327	\$126.79		
	On-Peak				27%				\$0.00992							61,818	\$613.23
	Shoulder				18%				\$0.00892							41,212	\$367.61
	Off-Peak				55%				\$0.00538							125,926	\$677.48
Winter (October throug	• /																
	Total					\$0.04645				671	\$31.17						
	First kWh		2,300	2,300			\$0.03812	\$0.03812				1,328	\$50.62	,	\$87.68		
	Excess kWh						\$0.00885	\$0.00885				0	\$0.00	14,327	\$126.79		
	On-Peak				15%				\$0.00992							34,344	\$340.69
	Shoulder				30%				\$0.00892							68,687	\$612.69
	Off-Peak				55%				\$0.00538							125,926	\$677.48
DEMAND	Total kW								\$0.88							554.7	\$488.14
Summer	First kW		10	10			\$0.00	\$0.00				6	\$0.00		\$0.00		
	Excess kW						\$4.86	\$4.86				0.0	\$0.00		\$198.77		
Winter	First kW		10	10			\$0.00	\$0.00				6	\$0.00		\$0.00		
	Excess kW						\$4.86	\$4.86				0.0	\$0.00		\$198.77		
TOTAL WINTER											\$34.90		\$56.15		\$418.77		\$3,019.00
TOTAL SUMMER	_										\$34.90		\$56.15		\$418.77		\$3,046.46
EFFECTIVE ANNUA	L										\$34.90		\$56.15		\$418.77		\$3,028.15
EFFECTIVE RATE											5.201		4.228		2.519		1.323

Rate 32 (R-1)	<u>Description</u> Residential	Availability  This rate is available for all domestic uses in a single private dwelling, in an individual apartment or in a residential condominium. Service under this rate to residential condominiums is available to the extent permitted by applicable regulations of the Massachusetts Department of Telecommunications and Energy. Service under this rate shall be Annual or Seasonal hereinafter defined an is subject to both the Company's printed requirements and the Company's Terms and Conditions - Distribution Service, each as in effect from time to time.
33 (G-1)	General	This rate is available for all non-residential uses of electricity to all Customers except those customers whose load for billing purposes either exceeds or is estimated to exceed 100 kilowatts in each of 12 consecutive billing months. Service under this rate is subject to both the Company's printed requirements and the Company's Terms and Conditions - Distribution Service, each as in effect from time to time.
33 (G-1)	General	This rate is available for all non-residential uses of electricity to all Customers except those customers whose load for billing purposes either exceeds or is estimated to exceed 100 kilowatts in each of 12 consecutive billing months. Service under this rate is subject to both the Company's printed requirements and the Company's Terms and Conditions - Distribution Service, each as in effect from time to time.
24 (G-3)	Large General Time-of-Use	This rate is available for all uses of electricity to Customers who establish demands in excess of 500 kilowatts for at least 12 consecutive month. Service under this rate is subject to both the Company's printed requirements and the Company's Terms and Conditions - Distribution Service, each as in effect from time to time.

Notes: Winter Pk split = 5/24\*5/7, Summer pk = 9/24\*5/7, Offpk = 9/24\*2/2

Adjusted rates to include pension adjustment factor per tariff.

	Residential	Small C&I	Medium C&I	Large C&I
2003 Average Usage				
Billing Demand (kW)	0.0	5.9	50.9	554.7
Total kWh	671	1,328	16,627	228,957
Hrs. Use		225	327	413

Bill Calculations

				`												
Fitchburg Gas & Electric					R1	GD2	GD2	GD3		R1		GD2		GD2		GD3
JULY 2005	RES	SM C&I	MED C&I	LG C&I												
Customer Charge:					\$3.02	\$6.83	\$6.83	\$500.00		\$3.02		\$6.83		\$6.83	I	\$500.00
Total					\$0.04251	\$0.01496	\$0.01496		671	\$28.52	1,328	\$19.87	16,627	\$248.74	I	
On-Peak				45%				\$0.01302							103,031	\$1,341.46
Off-Peak		1		55%				\$0.00352							125.926	\$443.26

Distribution Rates

Customer Charge	2:					\$3.02	\$6.83	\$6.83	\$500.00		\$3.02		\$6.83		\$6.83		\$500.00
	Total					\$0.04251	\$0.01496	\$0.01496		671	\$28.52	1,328	\$19.87	16,627	\$248.74		
	On-Peak				45%				\$0.01302							103,031	\$1,341.46
	Off-Peak				55%				\$0.00352							125,926	\$443.26
DEMAND	Total kW						\$5.94	\$5.94	\$2.95			5.9	\$35.05	50.9	\$302.35	554.7	\$1,636.37
TOTAL											\$31.54		\$61.75		\$557.92		\$3,921.09
EFFECTIVE R	RATE										4.700		4.650		3.356		1.713
Rate R1	<u>Description</u> Residential Delivery Se	ervice	under this rat meter and use	ailable under the e prior to the e ed for both dor	effective date o mestic and non	f this tariff pag domestic purpo	ge. Single Phas oses, billing sh	e motors exce	eding 5 horse nis Schedule o	power will be all nly if the predon	owed only uninant use of	pon approval by demand, determ	the Compar nined by the	ny in each instan Company on the	ce. When ser e basis of met	s and farms that r vice is delivered tered load data, c or Standard Offe	through one onnected loads

ads. Default Service from the Company pursuant to Schedules SOS or DS as amended from time to time. This Schedule is not available for service furnished for commercial or business purposes including garages, motels, hotels, and boarding houses or residences in which three or more rooms are rented, or for any other non-residential purposes.

Regular General Delivery Service Service is available under this Schedule at single locations to Commercial and Industrial customers where the Company delivers electricity for the exclusive use of the customer and not for resale. This Schedule is for delivery service only. Customers are required to obtain an energy supply from a Competitive Supplier or may be eligible for Standard Offer Service or Default Service from the Company pursuant to Schedules SOS or DS as amended from time to time. For commercial Customers with demands, excluding space heating and water heating loads eligible under the G-5 rate, consistently greater than or equal to four (4) kilowatts or ene consumption consistently greater than or equal to eight hundred fifty (850) kilowatt-hours per month and generally less than one hundred twenty thousand (120,000) kilowatt-hours per month.

Regular General Delivery Service Service is available under this Schedule at single locations to Commercial and Industrial customers where the Company delivers electricity for the exclusive use of the customer and not for resale. This Schedule is for delivery service only. Customers are required to obtain an energy supply from a Competitive Supplier or may be eligible for Standard Offer Service or Default Service from the Company pursuant to Schedules SOS or DS as amended from time to time. For commercial Customers with demands, excluding space heating and water heating loads eligible under the G-5 rate, consistently greater than or equal to four (4) kilowatts or ene consumption consistently greater than or equal to eight hundred fifty (850) kilowatt-hours per month and generally less than one hundred twenty thousand (120,000) kilowatt-hours per month.

> Service is available under this Schedule at single locations to Commercial and Industrial customers where the Company delivers electricity for the exclusive use of the customer and not for resale. This Schedule is for delivery service only. Customers are required to obtain an energy supply from a Competitive Supplier or may be eligible for Standard Offer Service or Default Service from the Company pursuant to Schedules SOS or DS as amended from time to time. For any industrial or large commercial Customer not participating in special contract rates with energy consumption generally greater than or equal to one hundred twenty thousand (120,000) kilowatt-hours per month.

Peak split = 15/24\*5/7Notes:

GD2

GD2

GD3

Adjusted rates to include pension adjustment factor per tariff.

Large General Delivery Service

	Residential	Small C&I	Medium C&I	Large C&I
2003 Average Usage		044	044	0442
Billing Demand (kW)	0.0	5.9	50.9	554.7
Total kWh	671	1,328	16,627	228,957
Hrs. Use		225	327	413

NEW ENGLAND							Distribution Rates Bill Calculations									
Western Mass.	Electric					R-1	G-0	G-0	T-2	R-1		G-0		G-0		T-2
JULY 2005		RES	SM C&I	MED C&I	LG C&I											
Customer Charge:						\$8.53	\$31.92	\$31.92	\$2,700.95	\$8.53		\$31.92		\$31.92	I	\$2,700.95
															I	
	Total					\$0.02929	\$0.00146	\$0.00146		671 \$19.65	\$1,328.00	\$1.94	\$16,627.00	\$24.28	I	
	On-Peak				48%				\$0.00264						109,899	\$290.13
	Off-Peak				52%										119,058	\$0.00
DEMAND	Total kW								\$1.66						554.70	\$920.80
	First kW		2	2			\$0.00	\$0.00			2.0	\$0.00	2.0	\$0.00	I	
	Excess kW						\$8.03	\$8.03			3.9	\$31.32	48.9	\$392.67	I	
TOTAL										\$28.18		\$65.18		\$448.87	I	\$3,911.88
EFFECTIVE RATE										4.200		4.908		2.700		1.709

Rate R-1	<u>Description</u> Residential	Availability  This rate is applicable to the entire electrical requirements in single family residences, residential outbuildings, farms, and individual apartments where residential uses of electricity constitute moor than 50% of custor energy use, and to common area use of condominiums except that this rate is not available to customers whose primary space heating source is electricity.
G-0	Small General Service	This rate is applicable to all uses of electricity at a single location. Such service shall not exceed 349 kW. All electricity delivered hereunder shall be measured through one metering equipment, except that, where the Company deems it impractical to deliver electricity through one services or where one meter has been installed, then the measurement of the amount of electricity consumed may be by two or more meters. All electricity supplied shall be for the exclusive use of the customer and shall not be resold. With the approval of the Company the customer may furnish electricity to persons or concerns who occupy space in the building to which service is supplied hereunder, but on the express condition that the customer shall not resell, make a specific charge for, or re-meter (or submeter) or measure or control the use of any of the electricity so furnished.
G-0	Small General Service	This rate is applicable to all uses of electricity at a single location. Such service shall not exceed 349 kW. All electricity delivered hereunder shall be measured through one metering equipment, except that, where the Company deems it impractical to deliver electricity through one services or where one meter has been installed, then the measurement of the amount of electricity consumed may be by two or more meters. All electricity supplied shall be for the exclusive use of the customer and shall not be resold. With the approval of the Company the customer may furnish electricity to persons or concerns who occupy space in the building to which service is supplied hereunder, but on the express condition that the customer shall not resell, make a specific charge for, or re-meter (or submeter) or measure or control the use of any of the electricity so furnished.
T-2	Large Primary Service Time-of-Use	This rate is applicable only to the entire use of electricity at a single location where service requires only primary facilities. All electricity shall be measured through one meter, except that, where the Company deems it impractical to deliver electricity through one service, or where more than one meter has been installed, then the measurement of electricity may be by two or more meters. With the approval of the Company the customer may furnish electricity to persons or concerns who occupy space in the building to which service is supplied hereunder, but on the express condition that the customer shall not resell, make a specific charge for, or remeter (or submeter) or measure or control the use of any of the electricity so furnished. Customers whose maximum demand equaled or exceeded 350 kW at any time in the most recent 12 months and new customers whose demand is reasonable anticipated to equal or exceed 350 kW within one year must take service under this rate.

Notes: Peak split = 16/24\*5/7

	Residential	Small C&I	Medium C&I	Large C&I
2003 Average Usage				
Billing Demand (kW)	0.0	5.9	50.9	554.7
Total kWh	671	1,328	16,627	228,957
Hrs. Use		225	327	413

	NEW ENGLAND		Distribution Rates	Bill Calculations
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Bangor Hydr	ro-Elec Compan	ıy				A	B-1	D-1	D-1		A		B-1		D-1		D-1
JULY 2005	1	RES	SM C&I	MED C&I	LG C&I	А	D-1	D-1	D-1		А		D-1		D-1		D-1
Customer Charge:		1125	52 CCC2	milio our	20 041	\$5.42	\$12.83	\$39.50	\$39.50		\$5.42		\$12.83		\$39.50		\$39.50
Off-Peak Season(March thr	rough October)						77-100	4	40.00				4		407100		40,100
	Total						\$0.03722	\$0.01912	\$0.01912			1,328	\$49.43	16,627	\$317.91	228,957	\$4,377.66
	First kWh	100				\$0,00000			40.002	100	\$0.00	-,		,	******	,	+ 1,0
	Excess kWh					\$0.05420				571	\$30.95						
Peak Season (November th	rough February)										,						
	Total						\$0.03722	\$0.02049	\$0.02049			1,328	\$49.43	16,627	\$340.69	228,957	\$4,691.33
	First kWh	100				\$0,00000				100	\$0.00	,		.,.		.,	, ,
	Excess kWh					\$0.05420				571	\$30.95						
DEMAND																	
Off-Peak Season	First kW			0	0			\$0.00	\$0.00					0	\$0.00	0.0	\$0.00
	Excess kW							\$1.44	\$1.44					50.9	\$73.30	554.7	\$798.77
Peak Season	First kW			0	0			\$0.00	\$0.00					0	\$0.00	0.0	\$0.00
	Excess kW							\$1.65	\$1.65					50.9	\$83.99	554.7	\$915.26
TOTAL PEAK SEASON											\$36.37		\$62.26		\$464.18		\$5,646.09
TOTAL OFF PEAK SEA	SON										\$36.37		\$62.26		\$430.71		\$5,215.93
EFFECTIVE ANNUAL											\$36.37		\$62.26		\$441.87		\$5,359.32
EFFECTIVE RATE											5.420		4.688		2.658		2.341

Rate A	<u>Description</u> Residential Service Rate	Availability  Service under this rate is available for lighting and other domestic purposes in individual residences and individual apartments. It is not applicable where the use of electricity is for commercial purposes. Customers taking service under this rate schedule are responsible for paying both Distribution service and Stranded Cost.
B-1	General Service Rate	Service under this rate is available for all commercial purposes to customers with billing demands of less than 25 kW. The 25 kW ceiling that applied to existing customers receiving service under this rate prior to November 1, 1986 is removed. Customers taking service under this rate schedule are responsible for paying both Distribution Service and Stranded Cost.
D-1	Large Power Rate - Secondary	Service under this rate is available for all commercial and industrial where the customer agrees to pay for service on this basis of 25 kW or more of demand. Customers taking service under this rate schedule are responsible for paying both Distribution Service and Stranded Cost.
D-1	Large Power Rate - Secondary	Service under this rate is available for all commercial and industrial where the customer agrees to pay for service on this basis of 25 kW or more of demand. Customers taking service under this rate schedule are responsible for paying both Distribution Service and Stranded Cost.
Notes:	Adjusted rates to remove Conserv	ation Assessment Charge which is included in the distribution rates listed in tariff.

	Residential	Small C&I	Medium C&I	Large C&I
2003 Average Usage				
Billing Demand (kW)	0.0	5.9	50.9	554.7
Total kWh	671	1,328	16,627	228,957
Hrs. Use		225	327	413

NEW ENGLAND Distribution Rates Bill Calculations
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Maine Public Service					A	С	E-S	E-S		A		С		E-S		E-S
JULY 2005	RES	SM C&I	MED C&I	LG C&I												
Customer Charge:					\$4.75	\$11.97	\$41.46	\$41.46		\$4.75		\$11.97		\$41.46		\$41.46
Summer (April through October)																
Total						\$0.019605	\$0.000000	\$0.000000			1,328	\$26.04	16,627	\$0.00	228,957	\$0.00
First kWh	100				\$0.000000				100	\$0.00						
Excess kWh					\$0.047459				571	\$27.10						
Winter (November through March)																
Total						\$0.050579	\$0.003161	\$0.003161			1,328	\$67.17	16,627	\$52.56	228,957	\$723.73
First kWh	100				\$0.000000				100	\$0.00						
Excess kWh					\$0.047459				571	\$27.10						
DEMAND																
Summer Total							\$4.37	\$4.37					50.9	\$222.43	554.7	\$2,424.04
Winter Total							\$8.63	\$8.63					50.9	\$439.27	554.7	\$4,787.06
TOTAL WINTER										\$31.85		\$79.14		\$533.29		\$5,552.25
TOTAL SUMMER										\$31.85		\$38.01		\$263.89		\$2,465.50
EFFECTIVE ANNUAL										\$31.85		\$55.15		\$376.14		\$3,751.65
EFFECTIVE RATE					, and the second	·	•	·	·	4.747		4.153		2.262		1.639

A A	Description Residential Service	Availability This rate is available to any year-round customer for residential service as defined in the Company's Terms and Conditions.
С	General Service	Except as provided under "Special Terms and Conditions", this rate is available to any customer whose monthly demand requirements are not in excess of 50 kilowatts during any two of the five consecutive months from November through March for commercial or industrial purposes used through one metered service.
E-S	Large Power Service - Secondary	This rate is available to any industrial, commercial or general customer whose service is taken at secondary voltage and whose maximum demand is at least 50 kilowatts but less than 500 kilowatts during any two of the five consecutive months from November through March and who is not taking service under Rate E-S-T. Contracts for 500 kilowatts or more must be in writing.
E-S	Large Power Service - Secondary	This rate is available to any industrial, commercial or general customer whose service is taken at secondary voltage and whose maximum demand is at least 50 kilowatts but less than 500 kilowatts during any two of the five consecutive months from November through March and who is not taking service under Rate E-S-T. Contracts for 500 kilowatts or more must be in writing.
Notes:	Straightforward mapping of rates.	

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	Residential		Medium C&I	Large C&I
2003 Average Usage				
Billing Demand (kW)	0.0	5.9	50.9	554.7
Total kWh	671	1,328	16,627	228,957
Hrs. Use		225	327	413

NEW ENGLAND			Distribut	ion Rates		Bill Calculations						
Granite State Electric		D	C3	G2	C1	n	C3	G2	C1			

Granite State Electric					D	G3	G2	G1		D		G3		G2		G1
JULY 2005	RES	SM C&I	MED C&I	LG C&I												
Customer Charge:					\$4.72	\$5.95	\$26.87	\$100.34		\$4.72		\$5.95		\$26.87		\$100.34
To	al					\$0.03378	\$0.00092				1,328	\$44.86	16,627	\$15.30		l
First kV	/h 250				\$0.01830				250	\$4.58						
Excess kV	7h				\$0.04672				421	\$19.67						l
On-Pe	ık			39%				\$0.00203							89,293	\$181.26
Off-Pe	ak			61%				\$0.00057							139,664	\$79.61
DEMAND Total k	W						\$4.86	\$4.39					50.9	\$247.37	554.7	\$2,435.13
TOTAL										\$28.97		\$50.81		\$289.54		\$2,796.34
EFFECTIVE RATE										4.317		3.826		1.741		1.221

<u>Rate</u> D	<u>Description</u> Domestic Service Rate	Availability  Retail Delivery Service under this rate is available for all domestic purposes in an individual dwelling or an individual apartment and for farm purposes. If electricity is delivered through more than one meter, the charge for electricity delivered through each meter shall be computed separately under this rate.
G3	General Service Rate	Retail Delivery Service under this rate is available for all purposes except for resale. A Customer will take delivery service on this rate if the Company estimates that its average use will be less than 20 kW of demand. If electricity is delivered through more than one meter, except at the Company's option, the charge for electricity delivered through each meter shall be computed separately under this rate.
G2	General Long Hour Service Rate	Retail Delivery Service under this rate is available for all purposes except resale, subject to the provisions of this section. A Customer will take delivery service on this rate if the Company estimates that its average use will be greater than or equal to 20 kW of Demand but is less than 200 kW of Demand. If electricity is delivered through more than one meter, except at the Company's option, the charge for electricity delivered through each meter shall be computed separately under this rate. A customer may be transferred from rate G-2 at its request or at the option of the Company if the customer's twelve (12) month average monthly demand is less than 18 kW of demand for three consecutive months. If any electricity is delivered hereunder at a given location, then all electricity delivered by the Company at such location shall be furnished hereunder, except such electricity as may be delivered under the provisions of the Limited Commercial Space Heating Rate V.
Gl	General Service Time-of-use Rate	Retail Delivery Service under this rate is available for all purposes except resale, subject to the provisions of this section. A Customer will take delivery service on this rate if the Company estimates that its average use will be greater than or equal to 200 kW of Demand. A Customer may be transferred from rate GI at its request or at the option of the Company if the customer's 12 month average monthly demand is less than 180 kW of Demand for 3 consecutive months. If electricity is delivered through more than one meter, except at the Company's option, the charge for electricity delivered through each meter shall be computed separately under this rate. If any electricity is delivered hereunder at a given location, then all electricity delivered by the Company at such location shall be furnished hereunder, except such electricity as may be delivered under the provisions of the Limited Commercial Space Heating Rate V. The actual delivery of service and the rendering of bills under this rate is contingent upon the installation of the necessary tineuse metering equipment

provisions of the Limited Commercial Space Heating Rate V. The actual delivery of service and the rendering of bills under this rate is contingent upon the installation of the necessary touteuse metering equipment by the Company; subject to both the availability of such meters from the Company's supplier and the conversion or installation procedures established by the Company. All customers served on this rate must elect to take their total electric service under the time use metering installation as approved by the Company. If delivery is through more than one meter, except at the Company's option, the Monthly Charge for service through each meter shall be computed separately under this rate.

Notes: Peak split = 13/24\*5/7

Distribution energy charge includes Business Profits Tax Surcharge.

NEW ENGLAND

	Residential	Small C&I	Medium C&I	Large C&I
2003 Average Usage				
Billing Demand (kW)	0.0	5.9	50.9	554.7
Total kWh	671	1,328	16,627	228,957
Hrs. Use		225	327	413

Bill Calculations

NH Electric Co-Op					В	В	LB3	P	В	В	LB3		P
JULY 2005	RES	SM C&I	MED C&I	LG C&I				<500kW					
Customer Charge:					\$20.00	\$20.00	\$240.00	\$625.00	\$20.00	\$20.00	\$240.00		\$625.00
Total					\$0.02567	\$0.02567	\$0.01900	\$0.01540	671 \$17.22	1,328 \$34.09	16,627 \$315.91	228,957	\$3,525.94
DEMAND													
First kW			40	125			\$0.00				40 \$0.00	125.0	\$0.00
Excess kW							\$6.00	\$5.00			10.9 \$65.40	429.7	\$2,148.50
TOTAL									\$37.22	\$54.09	\$621.31		\$6,299.44
EFFECTIVE RATE									5.547	4.073	3.737		2.751

Distribution Rates

<u>Rate</u> B	<u>Description</u> Standard Basic Service	Availability  Basic Service is available for any single-phase service including individual residentces, apartments, and business, provided that such service is less than or equal to 400 amps.
В	Standard Basic Service	Basic Service is available for any single-phase service including individual residentces, apartments, and business, provided that such service is less than or equal to 400 amps.
LB3	Basic 3 Phase (>=50<150 kW)	This service is for those members whose registered kilowatt demand is greater or equal to 50 kilowatts but less than 150 kilowatts for three or more billing periods of a 12-month period. The load of each member who
P	Primary Service	This service is available for primary voltage electricity delivered for general service in a specified location furnished to any member who agrees to own, furnish, maintain and be sole responsible for all wiring, structures, transforming and regulating devices, and all other fixtures and apparatus used in conducting the flow of electric energy delivered to the member by the Cooperative from the load side of the metering equipment. In locations in which space limitations or other factors make it impossible or inadvisable, in the opinion of the Cooperative, for the member to have transforming apparatus devoted to his exclusive uses, and in secondary network areas in which primary service is not made available by the Cooperative, at the Cooperative's option, service shall be supplied from Cooperative-owned transforming apparatus which also supplies other members. In such cases, the member is subject to additional charges in accordance with the Cooperative's Schedule of Fees, Charges and Rates.

Notes: Straightforward mapping of rates.

	Residential	Small C&I	Medium C&I	Large C&I
2003 Average Usage				
Billing Demand (kW)	0.0	5.9	50.9	554.7
Total kWh	671	1,328	16,627	228,957
Hrs. Use		225	327	413

NIEA	W ENGLAND						Distributi	on Rates	l				Bill Calc	ulations			
T(E)	WENGBAND				ı		Distribut	on Rates	<u> </u>				Din Calc	mations			
Un	nitil Energy Services, Inc					D	G-2	G-2	G-1		D		G-2		G-2		G-1
ULY 2005	· I	RES	SM C&I	MED C&I	LG C&I	ь	G-2	G-2	G-1		ь		G-2		G-2		G-1
Customer Charge	te:		2112 2212			\$7.00	\$9.00	\$9.00	\$182.85		\$7.00		\$9.00		\$9.00		\$182.85
Č	Total						\$0.00160	\$0.00160	\$0.00160			1,328	\$2.12	16,627	\$26.60	228,957	\$366.3
	First kWh	250				\$0.01393				250	\$3.48						
	Excess kWh					\$0.02326				421	\$9.79						
EMAND	Total kW						\$6.13	\$6.13	\$4.65			5.9	\$36.17	50.9	\$312.02	554.7	\$2,579.3
TOTAL											\$20.27		\$47.29		\$347.62		\$3,128.5
EFFECTIVE R	RATE										3.021		3.561		2.091		1.366
3-2	Regular General Service		others. Single to obtain ener	e phase motors	exceeding (5) m a Competiti	horsepower w ve Supplier, se	ill be allowed elf-supply, or i	only upon app nay be eligible	roval by the C for Transition	ludes the operation of the company in each of Service or Defa	instance. Eff ult Service po	ective on Choi	ce Date, this S edules TS or D	chedule is for	delivery servi	ce only. Custor	ners are requ
										or demand and go	cherai less uia	n one-hundre	thousand (10				dustrial or
G-2	Regular General Service		others. Single to obtain ener	e phase motors gy supplier fro	exceeding (5) m a Competiti	horsepower w ve Supplier, se	ill be allowed elf-supply, or i	only upon app nay be eligible	roval by the C for Transition	ludes the operation and go company in each a Service or Defa of demand and go	on of single pinstance. Effult Service pu	phase motors hective on Choi	aving such cha ce Date, this S edules TS or D	0,000) kilowat aracteristics an Schedule is for oS as amended	t-hours per model d so operated delivery servi from time to t	onth.  as not to impair ce only. Custor ime. For any ir	service to

Notes: Straightforward mapping of rates.

	Residential	Small	Medium	Large
		C&I	C&I	C&I
2003 Average Usage				
Billing Demand (kW)	0.0	5.9	50.9	554.7
Total kWh	671	1,328	16,627	228,957
Hrs. Use		225	327	413

NEW ENGLAND	Distribution Rates	Bill Calculations

Narraga	nsett Electric					A16	C06	G02	G32	A16	C06		G02		G32
JULY 2005		RES	SM C&I	MED C&I	LG C&I										
Customer Charge:						\$2.75	\$6.00	\$103.41	\$236.43	\$2.75	\$6.0	0	\$103.41		\$236.43
	Total					\$0.03380	\$0.03662	\$0.00777	\$0.00889	671 \$22.68	1,328 \$48.6	3 16,627	\$129.19	228,957	\$2,035.43
DEMAND	Total kW								\$2.10					554.7	\$1,164.87
	First kW			10				\$0.00				10	\$0.00		
	Excess kW							\$3.23				40.9	\$132.11		
TOTAL										\$25.43	\$54.6	3	\$364.71		\$3,436.73
GET	4%									\$1.06	\$2.2	8	\$15.20		\$143.20
TOTAL WITH GET										\$26.49	\$56.9	1	\$379.91		\$3,579.93
EFFECTIVE RATE										3.948	4.28	5	2.285		1.564

Rate A16	<u>Description</u>	Availability  Electric delivery service under this rate is available for all domestic purposes in an individual private dwelling or an individual private apartment. Notwithstanding the foregoing, service is not available under this rate for any customer required to take service on the Residential Time-of-Use Rate A-32. Service is also available for farm customers where all electricity is delivered by the Company. The Company may under unusual circumstances permit more than one set of living quarters to be served through one metering installation under this rate, but if so, the Customer Charge shall be multiplied by the number of separate living quarters so served. A church and adjacent buildings owned and operated by the church may be served under this rate, but any such buildings separated by public ways must be billed separately.
C06	Small C&I Rate	Electric delivery service under this rate is available for all purposes. If electricity is delivered through more than one meter, except at the Company's option, the Monthly Charge for service through each meter shall be computed separately under this rate. Notwithstanding the foregoing, the Company may require any customer with a 12nonth average demand greater than 200 kW to take service on the 200 kW Demand Rate G-32. I any electricity is delivered hereunder at a given location, then all electricity delivered by the Company at such location shall be delivered hereunder, except such electricity as may be delivered under the provisions of the Limited Service - Business Space Heating (V-02) rate.
G02	General C&I Rate	Electric delivery service under this rate is available for all purposes to customers with a Demand of 10 kilowatts or more. If electricity is delivered through more than one meter, except at the Company's option, the Monthly Charge for service through each meter shall be computed separately under this rate. Notwithstanding the foregoing, the Company may require any customer with a harmonic manager of the work of the company at such location shall be delivered hereunder, except such electricity as may be delivered under the provisions of the Limited Service Business Space Heating (V-02) rate.
G32	200 kW Demand Rate	Electric delivery service shall be taken under this rate for all purposes by any customer who is placed on the rate by the Company in accordance with this paragraph. The Company shall place on this rate any customer who has a 12-month average Demand of 200 kW or greater for 3 consecutive months as soon as practicable. Notwithstanding the foregoing, the Company may require any customer with a 12-month maximum demand of 3000 kW or greater to take delivery service on the 3000 kW Demand Rate G-62 (subject to the settlement provisions in Docket No. 2290). This paragraph shall not apply to delivery service taken under the Residential Storage Heating Rate E-30 or the Storage Cooling Rate E-40. For purposes of determining the customer's Demand, delivery service taken under rates E-30 and E-40 shall be excluded. Delivery service can be taken on a voluntary basis under this rate by customers who do not meet the minimum size requirements in this paragraph, provided however, that customers required to take delivery service under that tariff.

If any electricity is delivered hereunder at a given location, then all electricity deliveries by the Company at such location shall be delivered hereunder, except for delivery service taken under rate E-30 or E-40.

Notes: Reflects application of Gross Earnings Tax.

Notes:

	Residential	Small C&I	Medium C&I	Large C&I
2003 Average Usage				
Billing Demand (kW)	0.0	5.9	50.9	554.7
Total kWh	671	1,328	16,627	228,957
Hrs. Use		225	327	413

NEW JERSEY Distribution Rates Bill Calculations

Atlantic City F	Electric Co.					RS	MGS	AGS	AGS		RS		MGS		AGS		AGS
JULY 2005		RES	SM C&I	MED C&I	LG C&I												
Customer Charge:						\$2.33	\$4.49	\$87.22	\$87.22		\$2.33		\$4.49		\$87.22		\$87.22
Summer (June through Septemb	er)																
	First kWh	750	300	16,797	183,051	\$0.030416	\$0.040983	\$0.002491	\$0.002491	671	\$20.41	300	\$12.29	16,627	\$41.42	183,051	\$455.98
	Next kWh	0	900	82,500	82,500		\$0.025460	\$0.002457	\$0.002457	0	\$0.00	900	\$22.91	0	\$0.00	45,906	\$112.79
	Excess kWh					\$0.034463	\$0.022798	\$0.002457	\$0.002457	0	\$0.00	128	\$2.92	0	\$0.00	0	\$0.00
Winter (October through May)																	
	First kWh	500	300	16,797	183,051	\$0.030397	\$0.041048	\$0.002491	\$0.002491	500	\$15.20	300	\$12.31	16,627	\$41.42	183,051	\$455.98
	Next kWh	0	900	82,500	82,500		\$0.020771	\$0.002457	\$0.002457	0	\$0.00	900	\$18.69	0	\$0.00	45,906	\$112.79
	Excess kWh					\$0.025268	\$0.020771	\$0.002457	\$0.002457	171	\$4.32	128	\$2.66	0	\$0.00	0	\$0.00
DEMAND																	
Summer	First kW		3	25	25		\$0.00	\$0.20	\$0.20			3.0	\$0.00	25.0	\$4.99	25.0	\$4.99
	Next kW		0	875	875			\$4.99				0.0	\$0.00	25.9	\$129.26	529.7	\$2,643.50
	Excess kW			9,100	9,100		\$4.32	\$4.95	\$4.95			2.9	\$12.53	0.0	\$0.00	0.0	\$0.00
Winter	First kW		3	25	25		\$0.00	\$0.20				3.0	\$0.00	25.0	\$4.99	25.0	\$4.99
	Next kW		0	875	875			\$4.99	\$4.99			0.0	\$0.00	25.9	\$129.26	529.7	\$2,643.50
	Excess kW			9,100	9,100		\$3.54	\$4.95	\$4.95			2.9	\$10.27	0.0	\$0.00	0.0	\$0.00
TOTAL WINTER											\$21.85		\$48.42		\$262.89		\$3,304.48
TOTAL SUMMER											\$22.74		\$55.14		\$262.89		\$3,304.48
EFFECTIVE ANNUAL											\$22.15		\$50.66		\$262.89		\$3,304.48
EFFECTIVE RATE											3.301		3.815		1.581		1.443

Rate	<u>Description</u> Residential Service	Availability  Available for full domestic service to individually metered residential customers, including rural domestic customers, engaged primarily in agricultural pursuits.
RS	Residential Service	Available for full domestic service to individually metered residential customers, including fural domestic customers, engaged primarity in agricultural pursuits.
MGS	Monthly General Service - Secondary	Available at any point of the Company's system where facilities of adequate character and capacity exist for the entire electric service requirements of any customer delivered at one point and metered at or compensated to the voltage of delivery. This schedule is not available to residential customers.
AGS	Annual General Service - Secondar	y Available at any point of Company's system where facilities of adequate character and capacity exist for the entire electric service requirements of any customer contracting for annual service delivered at one point and metered at or compensated to the voltage of delivery.
AGS	Annual General Service - Secondar	y Available at any point of Company's system where facilities of adequate character and capacity exist for the entire electric service requirements of any customer contracting for annual service delivered at one point and metered at or compensated to the voltage of delivery.

Adjusted rates to remove New Jersey State Sales and Use Tax.

Adjusted rates to include Regulatory Assets Recovery Charge (per Rider RARC), Uncollectible Accounts Charge (per Rider SBC) and Transitional Energy Facility Assessment (per Rider TEFA).

	Residential	Small	Medium	Large
		C&I	C&I	C&I
2003 Average Usage				
Billing Demand (kW)	0.0	5.9	50.9	554.7
Total kWh	671	1,328	16,627	228,957
Hrs. Use		225	327	413

NEW JERSEY Distribution Rates Bill Calculations
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Jersey Central Pov	ver & Ligl	ht				RS	GS	GS	GS	RS		GS		GS		GS
JULY 2005		RES	SM C&I	MED C&I	LG C&I				<750kW							
Customer Charge:						\$2.05	\$3.03	\$10.88	\$10.88	\$2.0	5	\$3.03		\$10.88		\$10.88
Summer (June through September)	)															
	First kWh	600	1,000	1,000	1,000	\$0.018482	\$0.060965	\$0.060965	\$0.060965	600 \$11.0	1,000	\$60.97	1,000	\$60.97	1,000	\$60.97
E	Excess kWh					\$0.063468	\$0.007655	\$0.007655	\$0.007655	71 \$4.5	328	\$2.51	15,627	\$119.62	227,957	\$1,745.01
Winter (October through May)																
	First kWh	1,000	1,000	1,000	1,000	\$0.028199	\$0.056634	\$0.056634	\$0.056634	671 \$18.9	1,000	\$56.63	1,000	\$56.63	1,000	\$56.63
E	Excess kWh					\$0.028199	\$0.007655	\$0.007655	\$0.007655	0 \$0.0	328	\$2.51	15,627	\$119.62	227,957	\$1,745.01
DEMAND																
Summer	First kW		10	10	10		\$0.00	\$0.00	\$0.00		5.9	\$0.00	10.0	\$0.00	10.0	\$0.00
	Excess kW						\$6.49	\$6.49	\$6.49		0.0	\$0.00	40.9	\$265.44	544.7	\$3,535.10
Winter	First kW		10	10	10		\$0.00	\$0.00	\$0.00		5.9	\$0.00	10.0	\$0.00	10.0	\$0.00
	Excess kW						\$6.04	\$6.04	\$6.04		0.0	\$0.00	40.9	\$247.04	544.7	\$3,289.99
TOTAL WINTER										\$20.9	7	\$62.17		\$434.17		\$5,102.51
TOTAL SUMMER										\$17.6	5	\$66.51		\$456.91		\$5,351.96
EFFECTIVE ANNUAL			•				•		•	\$19.8	5	\$63.62		\$441.75		\$5,185.66
EFFECTIVE RATE										2.96	)	4.790		2.657		2.265

RS RS	<u>Description</u> Residential Service	Availability  Available for: (a) Individual Residential Structures; (b) separately metered residences in Multiple Residential Structures; (c) incidental use for not-residential purposes when included along with the residence; and/or (d) Auxiliary Residential Purposes whether metered separately from the residence or not. This Service Classification is optional for customers which elect to be billed hereunder rather than under Service Classification RT.
GS	General Service Secondary	Available for general service purposes at secondary voltages not included under Service Classifications RS, RT, RGT or GST.
GS	General Service Secondary	Available for general service purposes at secondary voltages not included under Service Classifications RS, RT, RGT or GST.
GS	General Service Secondary	Available for general service purposes at secondary voltages not included under Service Classifications RS, RT, RGT or GST.
Notes:	Adjusted rates to remove New Jerse Adjusted rates to include Remediati	y State Sales and Use Tax. on Adjustment Factor (per Rider RAC). Uncollectible Accounts Charge (per Rider UNC) and Transitional Energy Facility Assessment (per Rider TEFA).

	Residential	Small C&I	Medium C&I	Large C&I
2003 Average Usage				
Billing Demand (kW)	0.0	5.9	50.9	554.7
Total kWh	671	1,328	16,627	228,957
Hrs. Use		225	327	413

	NEW JERSEY		Distribution Rates	Bill Calculations
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Dalita Camira E	14 0 C	_															
Public Service E	iectric & G	as				RS	GLP	GLP	LPL		RS		GLP		GLP		LPL
JULY 2005		RES	SM C&I	MED C&I	LG C&I												
Customer Charge:						\$2.27	\$3.96	\$3.96	\$347.77		\$2.27		\$3.96		\$3.96		\$347.77
Summer (June through Septemb	er)																
	Total						\$0.009702	\$0.009702	\$0.000545			1,328	\$12.88	16,627	\$161.32	228,957	\$124.78
	First kWh	600	2,300	2,300		\$0.027025				600	\$16.22						
	Excess kWh					\$0.030846				71	\$2.19						
Winter (October through May)																	
	Total						\$0.004160	\$0.004160	\$0.000545			1,328	\$5.52	16,627	\$69.17	228,957	\$124.78
	First kWh	600	2,300	2,300		\$0.034669				600	\$20.80						
	Excess kWh					\$0.034669				71	\$2.46						
DEMAND																	
Summer	First kW		0	0	0		\$0.0000	\$0.0000	\$0.0000			0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
	Excess kW						\$10.3935	\$10.3935	\$10.1859			5.9	\$61.32	50.9	\$529.03	554.7	\$5,650.12
Winter	First kW		0	0	0		\$0.0000	\$0.0000	\$0.0000			0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
	Excess kW						\$3.6393	\$3.6393	\$3.0144			5.9	\$21.47	50.9	\$185.24	554.7	\$1,672.09
TOTAL WINTER											\$25.53		\$30.95		\$258.37		\$2,144.64
TOTAL SUMMER											\$20.68		\$78.16		\$694.31		\$6,122.67
EFFECTIVE ANNUAL	•							•		•	\$23.91	•	\$46.69		\$403.68		\$3,470.65
EFFECTIVE RATE								·		<u> </u>	3.564	<u> </u>	3.516		2.428		1.516

RS RS	<u>Description</u> Residential Service	Availability  Delivery service for residential purposes. Customers may either purchase electric supply from a Third Party Supplier (TPS) or from Public Services Basic Generation Service default service as detailed in this rate schedule.
GLP	General Lighting and Power Service	e Delivery service for general purposes at secondary distribution voltages. Customers may either purchase electric supply from a Third Party Supplier (TPS) or from Public Services Basic Generation Service default service as detailed in this rate schedule.
GLP	General Lighting and Power Service	e Delivery service for general purposes at secondary distribution voltages. Customers may either purchase electric supply from a Third Party Supplier (TPS) or from Public Services Basic Generation Service default service as detailed in this rate schedule.
LPL	Large Power and Lighting Service	Delivery service for general purposes at secondary distribution voltages where the customer's measured peak demand exceeds 150 kilowatts in any month and also at primary distribution voltages. Customers may either purchase electric supply from a Third Party Supplier (TPS) or from Public Services Basic Generation Service default service as detailed in this rate schedule.

Rates listed in tariff do not include New Jersey State Sales and Use Tax.

Rates listed in tariff include Transitional Energy Facility Assessment.

Adjusted rates to include Amortization of Excess Depreciation Reserve Credit.

Notes:

	Residential	Small C&I	Medium C&I	Large C&I
2003 Average Usage				
Billing Demand (kW)	0.0	5.9	50.9	554.7
Total kWh	671	1,328	16,627	228,957
Hrs. Use		225	327	413

NEW JI	ERSEY						Distribut	ion Rates		Bill Calculations							
Rockland	d Electric Company	у				1	2	2	2		1		2		2		2
JULY 2005		RES	SM C&I	MED C&I	LG C&I				<1000kW								
Customer Charge:						\$3.63	\$6.16	\$6.16	\$6.16		\$3.63		\$6.16		\$6.16		\$6.1
Summer (June through	September)																
	First kWh	250	4,920	4,920	4,920	\$0.028877	\$0.033754	\$0.033754	\$0.033754	250	\$7.22	1,328	\$44.83	4,920	\$166.07	4,920	\$166.0
	Excess kWh					\$0.033632	\$0.021886	\$0.021886	\$0.021886	421	\$14.16	0	\$0.00	11,707	\$256.22	224,037	\$4,903.27
Winter (October through	h May)																
	First kWh	1,000	4,920	4,920	4,920	\$0.028877	\$0.030867	\$0.030867	\$0.030867	671	\$19.38	1,328	\$40.99	4,920	\$151.87	4,920	\$151.87
	Excess kWh					\$0.028877	\$0.021886	\$0.021886	\$0.021886	0	\$0.00	0	\$0.00	11,707	\$256.22	224,037	\$4,903.27
DEMAND																	
Summer	First kW		5	5	5		\$0.00	\$0.00	\$0.00			5.0	\$0.00	5.0	\$0.00	5.0	\$0.00
	Excess kW						\$2.84	\$2.84	\$2.84			0.9	\$2.56	45.9	\$130.34	549.7	\$1,560.94
Winter	First kW		5	5	5		\$0.00	\$0.00	\$0.00			5.0	\$0.00	5.0	\$0.00	5.0	\$0.00
	Excess kW						\$2.44	\$2.44	\$2.44			0.9	\$2.20	45.9	\$112.15	549.7	\$1,343.13
TOTAL WINTER											\$23.01	•	\$49.35	•	\$526.40		\$6,404.43
TOTAL SUMMER											\$25.01		\$53.55		\$558.79		\$6,636.44
EFFECTIVE ANNUA	AL .										\$23.68	•	\$50.75	•	\$537.20		\$6,481.77
EFFECTIVE RATE		_									3.529	·	3.822		3.231		2.831

<u>Rate</u> 1	Description Service Classification No. 1	Availability Sales and delivery of electric power provided by the Company or delivery of electric power supply provided by an electric generation supplier under the Company's Retail Access Program to residential customers. All service at each residence shall be taken through one meter. Service will also be furnished hereunder to a church and adjacent buildings (other than school buildings which substitute for public education), owned by the church and operated in conjunction therewith' provided, however, that if the buildings of any such church group are separated by a highway or by highways, then the electricity delivered to each group so separated shall not be combined with the electricity delivered to other buildings of the church group but shall be billed separately under this rate.
2	Service Classification No. 2	Sales and delivery of electric power provided by the Company or delivery of electric power supply provided by an electric generation supplier under the Company's Retail Access Program to general secondary or primary service customers. A customer taking primary service whose demand exceeds 1000 kW during any two of the previous twelve months shall not be eligible for this rate and shall be transferred to Service Classification No. 7. A customer so transferred shall only be eligible to transfer back to Service Classification No. 2 on the annual anniversary of the transfer to Service Classification No. 7 and only if said customer has not exceeded 1000 kW during any two of the previous twelve months. All service at one location shall be taken through one meter except that service under Special Provision B shall be separately metered.
2	Service Classification No. 2	Sales and delivery of electric power provided by the Company or delivery of electric power supply provided by an electric generation supplier under the Company's Retail Access Program to general secondary or primary service customers. A customer taking primary service whose demand exceeds 1000 kW during any two of the previous twelve months shall not be eligible for this rate and shall be transferred to Service Classification No. 7. A customer so transferred shall only be eligible to transfer back to Service Classification No. 2 on the annual anniversary of the transfer to Service Classification No. 7 and only if said customer has not exceeded 1000 kW during any two of the previous twelve months. All service at one location shall be taken through one meter except that service under Special Provision B shall be separately metered.
2	Service Classification No. 2	Sales and delivery of electric power provided by the Company or delivery of electric power supply provided by an electric generation supplier under the Company's Retail Access Program to general secondary or primary service customers. A customer taking primary service whose demand exceeds 1000 kW during any two of the previous twelve months shall not be eligible for this rate and shall be transferred to Service Classification No. 7. A customer so transferred shall only be eligible to transfer back to Service Classification No. 2 on the annual anniversary of the transfer to Service Classification No. 7 and only if said customer has not exceeded 1000 kW during any two of the previous twelve months. All service at one location shall be taken through one meter except that service under Special Provision B shall be separately metered.

Notes: Adjusted rates to remove New Jersey State Sales.

Rates listed in tariff include Transitional Energy Facility Assessment per Rider - TEFA.

	Residential	Small C&I	Medium C&I	Large C&I
2003 Average Usage				
Billing Demand (kW)	0.0	5.9	50.9	554.7
Total kWh	671	1,328	16,627	228,957
Hrs. Use		225	327	413

NEW YORK						Distributi	on Rates					Bill Cal	culations			
Consolidated Edison of NY	?				SC-1	SC-2	SC-9	SC-9		SC-1		SC-2		SC-9		SC-9
JULY 2005	RES	SM C&I	MED C&I	LG C&I												
Customer Charge:					\$11.04	\$13.32	\$0.00	\$0.00		\$11.04		\$13.32		\$0.00		\$0.00
Summer (June through September)																
First kWh	250	900	15,000	15,000	\$0.04380	\$0.05724	\$0.01163	\$0.01163	250	\$10.95	900	\$51.52	15,000	\$174.45	15,000	\$174.45
Next kWh	0	1,100	0	0		\$0.05090			0	\$0.00	428	\$21.79	0	\$0.00	0	\$0.00
Excess kWh					\$0.04952	\$0.02367	\$0.01163	\$0.01163	421	\$20.85	0	\$0.00	1,627	\$18.92	213,957	\$2,488.32
Winter (October through May)																
Total																
First kWh	250	900	15,000	15,000	\$0.04380	\$0.04862	\$0.01163	\$0.01163	250	\$10.95	900	\$43.76	15,000	\$174.45	15,000	\$174.45
Next kWh	0	1,100	0	0	\$0.00000	\$0.04236	\$0.00000	\$0.00000	0	\$0.00	428	\$18.13	0	\$0.00	0	\$0.00
Excess kWh					\$0.04011	\$0.01413	\$0.01163	\$0.01163	421	\$16.89	0	\$0.00	1,627	\$18.92	213,957	\$2,488.32
DEMAND																
Summer First kW			5	5			\$10.63	\$10.63			5.9	\$0.00	5.0	\$53.15	5.0	\$53.15
Next kW			895	895			\$10.63	\$10.63			0.0	\$0.00	45.9	\$487.92	549.7	\$5,843.31
Winter First kW			5	5			\$8.45	\$8.45			5.9	\$0.00	5.0	\$42.25	5.0	\$42.25
Next kW			895	895			\$8.45	\$8.45			0.0	\$0.00	45.9	\$387.86	549.7	\$4,644.97
TOTAL WINTER										\$38.88		\$75.21		\$623.48		\$7,349.99
TOTAL SUMMER										\$42.84		\$86.63		\$734.44		\$8,559.23
EFFECTIVE ANNUAL										\$40.20		\$79.02		\$660.47		\$7,753.07
EFFECTIVE RATE										5.991		5.950		3.972		3.386

Rate SC-1	<u>Description</u> Residential and Religious	Availability  Applicable to Use of Service for light, heat, and power, when supplied directly by the Company to any single-family dwelling or building or to any individual flat or apartment in a multiple-family dwelling or building or portion thereof occupied as the home, residence or sleeping place of the Customer or an employee of the Customer, or when supplied directly by the Company to any corporation or association organized and conducted in good faith for religious purposes, where such electric service is utilized exclusively in connection with such religious purposes, to a community residence, or to a post or hall owned or leased by a not-for-profit corporation that is a veterans' organization, subject to the Special Provisions hereof.
SC-2	General - Small	Applicable to Use of Service for light, heat, and power for general uses where the Customer's requirements do not exceed 10 kilowatts subject to the Common Provisions Applicable to Rate I and Rate II and the Special Provisions of this Service Classification.
SC-9	General - Large	Applicable to Use of Service for light, heat, and power where the Customer's initial requirements are expected to be in excess of 10 kilowatts subject to the Common Provisions Applicable to Rate I and Rate II and th Special Provisions of this Service Classification.
SC-9	General - Large	Applicable to Use of Service for light, heat, and power where the Customer's initial requirements are expected to be in excess of 10 kilowatts subject to the Common Provisions Applicable to Rate I and Rate II and th Special Provisions of this Service Classification.
Source:	Exhibit SMM-5	

Notes:

For Large C&I time of day under SC-9 not required because not >1,500kW Chose rates for Customers taking bundled service as this service is most comparable to those of the other utilities.

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid Docket No. DTE 06-\_ Exhibit SMM-3 Page 20 of 27

	Residential	Small C&I	Medium C&I	Large C&I
2003 Average Usage				
Billing Demand (kW)	0.0	5.9	50.9	554.7
Total kWh	671	1,328	16,627	228,957
Hrs. Use		225	327	413

PENNSYLVANIA Distribution Rates Bill Calculations

Duquesne Light Company	,				RS	GS/GM	GS/GM	GL	RS		GS/GM		GS/GM		GL
JULY 2005	RES	SM C&I	MED C&I	LG C&I				<900kW							
Customer Charge:					\$6.48	\$9.21	\$9.21	\$730.85	\$6.4	8	\$9.21		\$9.21		\$730.85
Total					\$0.030694			\$0.004545	671 \$20.6	0				228,957	\$1,040.61
First kWh		550	550			\$0.026693	\$0.026693			550	\$14.68	550	\$14.68		
Next kWh		750	750			\$0.024967	\$0.024967			750	\$18.73	750	\$18.73		
Excess kWh						\$0.006743	\$0.006743			28	\$0.19	15,327	\$103.35		
DEMAND															
First kW		5	5	300		\$0.00	\$0.00	\$0.00		5.0	\$0.00	5.0	\$0.00	300.0	\$0.00
Excess kW						\$3.60	\$3.60	\$1.85		0.9	\$3.24	45.9	\$165.24	254.7	\$471.20
TOTAL									\$27.0	8	\$46.05		\$311.21		\$2,242.66
State Tax Adj0.3662%									-\$0.1	0	-\$0.17		-\$1.14		-\$8.21
TOTAL WITH State Tax Adj.									\$26.9	8	\$45.88		\$310.07		\$2,234.45
EFFECTIVE RATE									4.02	1	3.455		1.865	·	0.976

Rate Description Availability

Residential Service

Available to residential or combined residential and farm customers using the Company's standard low voltage service for lighting, appliance operation, and general household purposes and for commercial or professional activity where associated consumption represents less than 25% of the total monthly usage at the premise. Available only when supplied at 240 volt (or less) single phase service through a single meter directly by the Company to a single family dwelling or to an individual dwelling unit in a multiple dwelling structure. For the purposes of this rate, a dwelling unit is defined as one or more rooms arranged for the use of one or more individuals for shelter, sleeping, dining, and with permanent provisions for cooking and sanitation.

GS/GM General Service Small and Medium Available for all the standard electric service taken on a small or medium general service customer's premises for which a residential rate is not available.

GS/GM General Service Small and Medium Available for all the standard electric service taken on a small or medium general service customer's premises for which a residential rate is not available.

GL General Service Large Available of all the standard electric service taken on a customer's premises where the demand is not less than 300 kilowatts.

Notes: Reflects application of the state tax adjustment surcharge per Rider No. 10 - State Tax Adjustment.

	Residential	Small C&I	Medium C&I	Large C&I
2003 Average Usage				
Billing Demand (kW)	0.0	5.9	50.9	554.7
Total kWh	671	1,328	16,627	228,957
Hrs. Use		225	327	413

	PENNSYLVANIA	Distribution Rates	Bill Calculations
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M. P. El																	
Metropolitan Edi	ison Compa	ny				RS	GS	GS	GST		RS		GS		GS		GST
JULY 2005		RES	SM C&I	MED C&I	LG C&I		<400hrsuse	<400kW									
Customer Charge:						\$6.67	\$8.37	\$16.74	\$95.06		\$6.67		\$8.37		\$16.74		\$95.06
	Total					\$0.030290				671	\$20.32						
	First kWh		2,000	2,000			\$0.035000	\$0.035000				1,328	\$46.48	2,000	\$70.00		
	Excess kWh						\$0.007200	\$0.007200					\$0.00	8,180	\$58.90		
	First hrs use		200	200			\$0.000000	\$0.000000				0	\$0.00	10,180	\$0.00		
I	Excess hrs use						\$0.006600	\$0.006600				0	\$0.00	6,447	\$42.55		
	On-Peak				36%				\$0.003440							81,738	\$281.18
	Off-Peak				64%				\$0.003440							147,219	\$506.43
DEMAND	Total kW								\$4.02							555	\$2,229.89
	First kW		5	5	300		\$0.00	\$0.00				5.0	\$0.00	5.0	\$0.00		
	Excess kW						\$4.57	\$4.57				0.9	\$4.11	45.9	\$209.76		
TOTAL											\$26.99		\$58.96		\$397.95		\$3,112.56
State Tax Adj. 1.3	2300%										\$0.33		\$0.73		\$4.89		\$38.28
TOTAL WITH State Tax Adj.											\$27.32		\$59.69		\$402.84		\$3,150.84
EFFECTIVE RATE											4.072		4.495		2.423		1.376

Rate RS	Description Residential Service Rate	Availability  This Rate is available to Full Service and Delivery Service Residential Customers using the Company's standard, single phase service through a single meter including not more than 2,000 watts of non-residential connected load served through the same meter. All charges are applicable to Full Service Customers. All charges, excluding Generation and Transmission, are applicable to Delivery Service Customers.
GS	General Service Secondary Rate	Available to Full Service and Delivery Service Customers using electric service through a single delivery location for lighting, heating and/or power service. Secondary voltage shall be supplied to Customers at a single transformer location when load does not require transformer capacity in excess of 2,500 KVA. Transformers for capacity greater than 2,500 KVA, if available, may be provided, upon Customer request and at the option of the Company. New Customers requiring transformer capacity in excess of 2,500 KVA and existing Customers whose load increases such that a transformer charge is required (over 2,500 KVA) shall be required to take untransformed service. All charges, excluding Generation and Transmission, are applicable to Delivery Service Customers.
GS	General Service Secondary Rate	Available to Full Service and Delivery Service Customers using electric service through a single delivery location for lighting, heating and/or power service. Secondary voltage shall be supplied to Customers at a single transformer location when load does not require transformer capacity in excess of 2,500 KVA. Transformers for capacity greater than 2,500 KVA, if available, may be provided, upon Customer request and at the option of the Company. New Customers requiring transformer capacity in excess of 2,500 KVA and existing Customers whose load increases such that a transformer charge is required (over 2,500 KVA) shall be required to take untransformed service. All charges, excluding Generation and Transmission, are applicable to Delivery Service Customers.
GST	General Service Secondary - Time- of-Day Rate	Available to Full Service and Delivery Service Customers using electric service through a single delivery location for lighting, heating, and/or power service whose registered demand is equal to or greater than 400 kW in two (2) consecutive months. Secondary voltage shall be supplied to Customers at a single transformer location when load does not require transformer capacity in excess of 2,500 KVA. Transformers for capacity greater than 2,500 KVA, if available, may be provided, upon Customer request and at the option of the Company. New Customers requiring transformer capacity in excess of 2,500 KVA and existing Customers whose load increases such that a transformer charge is required (over 2,500 KVA) shall be required to take untransformed service. All charges, excluding Generation and Transmission, are applicable to Delivery Service Customers.

Notes: Peak split = 12/24\*5/7

Reflects application of the state tax adjustment surcharge per Rider A - Tax Adjustment Surcharge.

	Residential	Small C&I	Medium C&I	Large C&I
2003 Average Usage				
Billing Demand (kW)	0.0	5.9	50.9	554.7
Total kWh	671	1,328	16,627	228,957
Hrs. Use		225	327	413

PENNSYLVANIA Distribution Rates Bill Calculations
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PECO Energy					R	GS	GS	GS	I	R		GS		GS		GS
JULY 2005	RES	SM C&I	MED C&I	LG C&I												
Customer Charge:					\$5.18	\$8.81	\$23.82	\$23.82		\$5.18		\$8.81		\$23.82		\$23.82
Summer (June through September)																
Total																
First kWh	500				\$0.044300				500	\$22.15						
Excess kWh	ı				\$0.051400				171	\$8.79						
First hrs use	,	80	80	80		\$0.034300	\$0.034300	\$0.034300			472	\$16.19	4,072	\$139.67	44,376	\$1,522.10
Next hrs use		80	80	80		\$0.016100	\$0.016100	\$0.016100			472	\$7.60	4,072	\$65.56	44,376	\$714.45
Excess hrs use	,			0		\$0.010200	\$0.010200	\$0.010200			384	\$3.92	8,483	\$86.53	133,128	\$1,357.91
Over X hu + Y				400		\$0.004500	\$0.004500	\$0.004500						\$0.00	7,077	\$31.85
Winter (October through May)																
Total					\$0.044300				671	\$29.73						
First hrs use	:	80	80	80		\$0.034300	\$0.034300	\$0.034300			472	\$16.19	4,072	\$139.67	44,376	\$1,522.10
Next hrs use	:										0	\$0.00	0	\$0.00	0	\$0.00
Excess hrs use	:			0		\$0.010200	\$0.010200	\$0.010200			856	\$8.73	12,555	\$128.06	177,504	\$1,810.54
				400		\$0.004500	\$0.004500	\$0.004500							7,077	\$31.85
DEMAND Total kW											5.9	\$0.00	50.9	\$0.00	554.7	\$0.00
TOTAL WINTER										\$34.91		\$33.73		\$291.55		\$3,388.31
TOTAL SUMMER										\$36.12		\$36.52		\$315.58		\$3,650.13
EFFECTIVE ANNUAL										\$35.31		\$34.66		\$299.56		\$3,475.58
State Tax Adj0.6800%									(	(\$0.24)		(\$0.24)		(\$2.04)		(\$23.63)
EFFECTIVE ANNUAL WITH State Tax	Adj.									\$35.07		\$34.42		\$297.52		\$3,451.95
EFFECTIVE RATE										5.227		2.592		1.789		1.508

<u>Rate</u> R	<u>Description</u> Residence Service	Availability Single-phase service in the entire territory of the Company to the dwelling and appurtenances of a single private family (or to a multiple dwelling unit building consisting of two to five dwelling units, whether occupied or not), for the domestic requirements of its members when such a service is supplied through one meter. Service is also available for related farm purposes when such service is supplied through one meter in conjunction with the farmhouse domestic requirements. The term "residence service" includes service to: (a) the separate dwelling unit in an apartment house or condominium, but not the halls, basement, or other portions of such building common to more than one such unit; (b) the premises occupied as the living quarters of five persons or less who unite to establish a common dwelling place for their own personal comfort and convenience on a cost-sharing basis; (c) the premises owned by a church, and primarily designated or set aside for, and actually occupied and used as, the dwelling place of a priest, rabbi, pastor, rector, nun or other functioning Chuch Divine, and the resident associates;  (d) private dwellings in which a portion of the space is used for the conduct of business by a person residing therein; (e) farm purpose uses by an individual employing the natural processes of growth for the production of grain, stock, dairy, poultry, garden truck, or other agricultural products.
GS	General Service	Service through a single metering installation for offices, professional, commercial or industrial establishments, governmental agencies, and other applications outside the scope of the Residence Service rate schedules.
GS	General Service	Service through a single metering installation for offices, professional, commercial or industrial establishments, governmental agencies, and other applications outside the scope of the Residence Service rate schedules.
GS	General Service	Service through a single metering installation for offices, professional, commercial or industrial establishments, governmental agencies, and other applications outside the scope of the Residence Service rate schedules.
Notes:	Reflects application of the state ta	x adjustment surcharge per State Tax Adjustment clause.

	Residential	Small C&I	Medium C&I	Large C&I
2003 Average Usage				
Billing Demand (kW)	0.0	5.9	50.9	554.7
Total kWh	671	1,328	16,627	228,957
Hrs. Use		225	327	413

	PENNSYLVANIA	Distribution Rates	Bill Calculations
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ъ .	EL															
Pennsylvania	Electric Compa	iny				RS	GS	GS	GST	RS		GS		GS		GST
JULY 2005		RES	SM C&I	MED C&I	LG C&I			<400hrsuse								
Customer Charge:						\$6.81	\$8.42	\$16.56	\$60.98	\$	.81	\$8.42		\$16.56		\$60.98
	Total					\$0.02973				671 \$1	.95					
	First kWh		2,000	2,000			\$0.03050	\$0.03050			1,	328 \$40.50	2,000	\$61.00		
	Next kWh		1,180	8,180			\$0.01780	\$0.01780				0 \$0.00	8,180	\$145.60		
	Excess kWh						\$0.01100	\$0.01100				0 \$0.00	6,447	\$70.92		
	On-Peak				36%				\$0.00026				0	\$0.00	82,425	\$21.43
	Off-Peak				64%				\$0.00006				0	\$0.00	146,532	\$8.79
DEMAND	Total kW								\$5.44						554.7	\$3,017.57
	Total kVAR	PF =	100%	100%	100%		\$0.312	\$0.312	\$0.312			5.9 \$1.84	50.9	\$15.88	554.7	\$173.07
	First kW		5	5	300		\$0.00	\$0.00				5.0 \$0.00	5.0	\$0.00		
	Excess kW						\$1.89	\$1.89				0.9 \$1.70	45.9	\$86.75		
TOTAL										\$2	.76	\$52.40		\$396.71		\$3,281.84
State Tax Adj.	1.3500%									\$	.36	\$0.71		\$5.36		\$44.30
TOTAL WITH State Tax	Adj.									\$2	.12	\$53.17		\$402.07		\$3,326.14
EFFECTIVE RATE							•		·	4	042	4.004		2.418	·	1.453

<u>Rate</u> RS	<u>Description</u> Residential Service Rate	Availability  This Rate is available to Full Service and Delivery Service Residential Customers using the Company's standard, single phase service through a single meter including not more than 2,000 watts of non-residential connected load served through the same meter. All charges are applicable to Full Service Customers. All charges, excluding Generation and Transmission, are applicable to Delivery Service Customers.
GS	General Service Secondary Rate	Available to Full Service and Delivery Service Customers using electric service through a single delivery location for lighting, heating and/or power service. Secondary voltage shall be supplied to Customers at a single transformer location when load does not require transformer capacity in excess of 2,500 KVA. Transformers for capacity greater than 2,500 KVA, if available, may be provided, upon Customer request and at the option of the Company. New Customers requiring transformer capacity in excess of 2,500 KVA and existing Customers whose load increases such that a transformer charge is required (over 2,500 KVA) shall be required to take untransformed service. All charges, excluding Generation and Transmission, are applicable to Delivery Service Customers.
GS	General Service Secondary Rate	Available to Full Service and Delivery Service Customers using electric service through a single delivery location for lighting, heating and/or power service. Secondary voltage shall be supplied to Customers at a single transformer location when load does not require transformer capacity in excess of 2,500 KVA. Transformers for capacity greater than 2,500 KVA, if available, may be provided, upon Customer request and at the option of the Company. New Customers requiring transformer capacity in excess of 2,500 KVA and existing Customers whose load increases such that a transformer charge is required (over 2,500 KVA) shall be required to take untransformed service. All charges, excluding Generation and Transmission, are applicable to Delivery Service Customers.
GST	General Service Secondary - Time- of-Day Rate	Available to Full Service and Delivery Service Customers using electric service through a single delivery location for lighting, heating, and/or power service whose registered demand is equal to or greater than 400 kW in two (2) consecutive months. Secondary voltage shall be supplied to Customers at a single transformer location when load does not require transformer capacity in excess of 2,500 KVA. Transformers for capacity greater than 2,500 KVA, if available, may be provided, upon Customer request and at the option of the Company. New Customers requiring transformer capacity in excess of 2,500 KVA and existing Customers whose load increases such that a transformer charge is required (over 2,500 KVA) shall be required to take untransformed service. All charges, excluding Generation and Transmission, are applicable to Delivery Service Customers.

Peak split = 12/24\*5/7 ( kVAR=0 (PF=100%), Medium C&I < 400 hrs use

Notes:

Reflects application of the state tax adjustment surcharge per Rider A - Tax Adjustment Surcharge.

	Residential	Small C&I	Medium C&I	Large C&I
2003 Average Usage				
Billing Demand (kW)	0.0	5.9	50.9	554.7
Total kWh	671	1,328	16,627	228,957
Hrs. Use		225	327	413

PENNSYLVANIA	Distribution Rates	Bill Calculations

	PennPower					RS	GS	GM	GM	RS	S		GS		GM		GM
JULY 2005		RES	SM C&I	MED C&I	LG C&I		<50kW										
Customer Charge:						\$8.89	\$14.44				\$8.89		\$14.44				
	Total					\$0.02329				671 \$	15.63						
DEMAND	Total kW							\$2.774	\$2.774					50.9	\$141.20	554.7	\$1,538.74
	First kW		3				\$0.000					3.0	\$0.00				
	Excess kW						\$4.361					2.9	\$12.65				
TOTAL										\$	24.52		\$27.09		\$141.20		\$1,538.74
State Tax Adj.	1.4200%										\$0.35		\$0.38		\$2.01		\$21.85
TOTAL WITH State	Tax Adj.									\$	24.87		\$27.47		\$143.21		\$1,560.59
EFFECTIVE RATE											3.706		2.069		0.861		0.682

<u>Rate</u> RS	<u>Description</u> Residential Service	Availability  Available for residential service, to installations served through one meter for each family unit in a residence or apartment. When service is used through the same meter for both residential and commercial purposes the General Service rate shall apply. This rate schedule is not available for commercial, institutional or industrial establishments.						
GS	General Service - Small	Available for service through a single metering installation for secondary light and power service for loads up to but not including 50 kW.						
GM	General Service - Medium	Available for secondary light and power service for loads of 50 kVA or greater. The billing load as hereinafter defined shall not be less than 50 kVA.						
GM	General Service - Medium	Available for secondary light and power service for loads of 50 kVA or greater. The billing load as hereinafter defined shall not be less than 50 kVA.						
Notes:	Reflects application of the state tax adjustment surcharge per Rider A - State Tax Adjustment Surcharge.  Adjusted residential rate to include Universal Service Charge per Universal Service Charge Rider.							

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid Docket No. DTE 06-\_ Exhibit SMM-3 Page 25 of 27

	Residential	Small C&I	Medium C&I	Large C&I
2003 Average Usage				
Billing Demand (kW)	0.0	5.9	50.9	554.7
Total kWh	671	1,328	16,627	228,957
Hrs. Use		225	327	413

PENNSYLVANIA Distribution Rates Bill Calculations

Pennsylvania Power & l	ight				RS	GS-1	GS-1	GS-3		RS		GS-1		GS-1		GS-3
JULY 2005	RES	SM C&I	MED C&I	LG C&I												
Customer Charge:					\$8.00	\$11.45	\$11.45	\$0.00		\$8.00		\$11.45		\$11.45	1	\$0.00
First k	Wh 20	)			\$0.02183				200	\$4.37					1	
Next k	Wh 60	)			\$0.01974				471	\$9.30					1	
Excess k	Wh				\$0.01852										1	
First hrs	use	150	150	200		\$0.02451	\$0.02451	\$0.00082			885	\$21.69	7,635	\$187.13	110,940	\$90.97
Next hrs	use	0	0	200				\$0.00063			0	\$0.00	0	\$0.00	110,940	\$69.89
Excess hrs	use					\$0.01688	\$0.01688	\$0.00050			443	\$7.48	8,992	\$151.78	7,077	\$3.54
DEMAND															1	
First	W	5	5	5		\$0.00	\$0.00	\$4.47			5.0	\$0.00	5.0	\$0.00	5.0	\$22.33
Excess	kW					\$2.36	\$2.36	\$4.47			0.9	\$2.12	45.9	\$108.32	549.7	\$2,454.96
TOTAL										\$21.67		\$42.74		\$458.68		\$2,641.69
State Tax Adj. 0.0880%										\$0.02		\$0.04		\$0.40		\$2.32
TOTAL WITH State Tax Adj.										\$21.69		\$42.78		\$459.08		\$2,644.01
EFFECTIVE RATE										3.232		3.221		2.761	i	1.155

<u>Rate</u> RS	Description         Availability           Residential Service         The Rate Schedule is for single	e phase residential service in accordance with the Applications Provisions hereof.
GS-1	Small General Service at Secondary This Rate Schedule is for small	l general service at secondary voltage or at a higher available voltage at the option of the customer.
GS-1	Small General Service at Secondary This Rate Schedule is for small	l general service at secondary voltage or at a higher available voltage at the option of the customer.
GS-3	,	general service at secondary voltage, or at a higher available voltage at the option of the customer. Where necessary, the Company furnishes and maintains one transformation from line andard service voltage. However, service from a 69,000 volt line or higher is supplied at not less than 2,300 volts.
Notes:	Reflects application of the state tax adjustment surcharge per State	Fax Adjustment rider.

	Residential	Small C&I	Medium C&I	Large C&I
2003 Average Usage				
Billing Demand (kW)	0.0	5.9	50.9	554.7
Total kWh	671	1,328	16,627	228,957
Hrs. Use		225	327	413

PENNSYLVANIA	Distribution Rates	Bill Calculations

T	ICI																
Ų	J <b>GI</b>					R	GS-4	GS-4	LP		R		GS-4		GS-4		LP
JULY 2005		RES	SM C&I	MED C&I	LG C&I		>5 kW										
Customer Charge:						\$5.50			\$135.80		\$5.50						\$135.80
	First kWh	500	2,000	2,000	2,000	\$0.03165				500	\$15.83						
	Next kWh	500	0	0	0	\$0.02684				171	\$4.59						
	Excess kWh					\$0.01971				0	\$0.00						
	First hrs use		200	200	100		\$0.03033	\$0.03033	\$0.01696			1,180	\$35.79	10,180	\$308.76	55,470	\$940.77
	Next hrs use		300	300	200		\$0.02303	\$0.02303	\$0.01518			148	\$3.41	6,447	\$148.47	110,940	\$1,684.07
	Excess hrs use						\$0.02031	\$0.02031	\$0.01383			0	\$0.00	0	\$0.00	62,547	\$865.03
DEMAND																	
	First kW		20	20	100		\$3.59	\$3.59	\$0.00			5.9	\$21.18	20.0	\$71.80	100.0	\$0.00
	Next kW		0	0	400				\$0.94			0.0	\$0.00	0.0	\$0.00	400.0	\$376.00
	Excess kW						\$1.30	\$1.30	\$0.69			0.0	\$0.00	30.9	\$40.17	54.7	\$37.74
TOTAL											\$25.92		\$60.38		\$569.20		\$4,039.41
State Tax Adj.	1.4700%										\$0.38		\$0.89		\$8.37		\$59.38
TOTAL WITH State Tax A	Adj.										\$26.30		\$61.27		\$577.57		\$4,098.79
EFFECTIVE RATE											3.920		4.614		3.474		1.790

<u>Rate</u> R	Description Residential Service	Availability  Available to Customers located on the Company's distribution lines and desiring service for household and non-residential uses (where the non-residential use(s) is limited to less than 2 kW) in a single private dwelling, or an individual dwelling in a multiple dwelling structure, and its appurtenant detached buildings.
GS-4	General Service (5 kW minimum)	Available to Customers located on Company's distribution lines desiring electric service for general lighting and/or power service whose minimum billing demand is not less than five (5) kilowatts.
GS-4	General Service (5 kW minimum)	Available to Customers located on Company's distribution lines desiring electric service for general lighting and/or power service whose minimum billing demand is not less than five (5) kilowatts.
LP	Large Power Service	Available to Customers taking general light and power service at each delivery point and whose minimum demand is not less than one hundred (100) kilowatts.
Notes:	Reflects application of the state tax	adjustment surcharge per tariff.

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid Docket No. DTE 06-Exhibit SMM-3 Page 27 of 27

	Residential	Small C&I	Medium C&I	Large C&I
2003 Average Usage				
Billing Demand (kW)	0.0	5.9	50.9	554.7
Total kWh	671	1,328	16,627	228,957
Hrs. Use		225	327	413

PENNSYLVANIA Distribution Rates Bill Calculations

W	estPenn					10	20	20	30		10		20		20		30
JULY 2005		RES	SM C&I	MED C&I	LG C&I			·	>100kW								
Customer Charge:						\$5.00					\$5.00						
	Total					\$0.01874				671	\$12.57						
	First kWh		354	3,054	40,000		\$0.03113	\$0.03113	\$0.00704			354	\$11.02	3,054	\$95.07	40,000	\$281.60
	Next kWh		700	700			\$0.01470	\$0.01470				700	\$10.29	700	\$10.29		
	Next kWh		7,500	7,500			\$0.01332	\$0.01332				274	\$3.65	7,500	\$99.90		
	Excess kWh						\$0.01300	\$0.01300	\$0.00630			0	\$0.00	5,373	\$69.85	188,957	\$1,190.43
DEMAND	Total kW											5.9	\$0.00	50.9	\$0.00		
	First kW				100				\$0.98							100	\$98.00
	Excess kW								\$0.82							455	\$372.85
TOTAL											\$17.57		\$24.96		\$275.11		\$1,942.88
State Tax Adj.	0.0600%										\$0.01		\$0.01		\$0.17		\$1.17
TOTAL WITH State Tax	x Adj.										\$17.58		\$24.97		\$275.28		\$1,944.05
EFFECTIVE RATE											2.620		1.880		1.656		0.849

Rate	<u>Description</u>	<u>Availability</u>
10	Domestic Service	Available for single-phase service to a single-family residence served through one meter.
20	General Service	Available for any purpose not included with the Availability of Schedule 10, Domestic Service, if all service at an establishment is supplied under this Schedule. Service shall not be available for Standby or Maintenance Service such as that required for Alternative Generation Facilities.
20	General Service	Available for any purpose not included with the Availability of Schedule 10, Domestic Service, if all service at an establishment is supplied under this Schedule. Service shall not be available for Standby or Maintenance Service such as that required for Alternative Generation Facilities.
30	General Power Service	Available for any purpose for loads totaling over 100 kilowatts at an establishment when all service at the establishment is served under this Schedule. Connections made before October 14, 1966, shall be for loads greater than 50 kilowatts. Loads over 1,500 kilowatts connected after August 28, 1985, will be served at voltages greater than 1,000 volts. Service shall not be available for Standby or Maintenance Service such as that required for Alternative Generation Facilities. An Electric Service Agreement shall be executed.

Notes: Reflects application of the state tax adjustment surcharge per State Tax Adjustment Surcharge rider.

MASSACHUSETTS ELECTRIC COMPANY
NANTUCKET ELECTRIC COMPANY
d/b/a NATIONAL GRID
Docket No. D.T.E. 06-\_\_\_
Witness: McCabe

# Exhibit SMM-4 Normalized July 1, 2005 Regional Index

### Massachusetts Electric Company Nantucket Electric Company Normalized July 1, 2005 Regional Index

						DISTRIBUTIO	N July 2005		
			% of Total						Weighted
Utility	State	Total 2003 MWh	MWh	Residential	Small C&I	Medium C&I	Large C&I	INDEX	Average
				R	G1	G2	G3		
Connecticut Light & Power Company	CT	24,116,876	7.3%	3.545	5.271	3.407	1.498	2.907	0.213
United Illuminating Company	CT	5,763,052	1.7%	4.933	5.151	3.299	1.775	3.512	0.061
Boston Edison Company (NSTAR)	MA	14,961,539	4.5%	4.917	5.549	4.066	2.867	4.071	0.185
Cambridge Electric Company (NSTAR)	MA	1,639,564	0.5%	3.580	2.545	2.047	1.111	2.318	0.012
Commonwealth Electric Company (NSTAR)	MA	4,173,545	1.3%	5.201	4.228	2.519	1.323	3.241	0.041
Fitchburg Gas & Electric Company (Unitil)	MA	515,669	0.2%	4.700	4.650	3.356	1.713	3.360	0.005
Western Massachusetts Electric Company (Northeast Utilities)	MA	4,023,433	1.2%	4.200	4.908	2.700	1.709	3.100	0.038
Bangor Hydro-Electric Company	ME	1,542,455	0.5%	5.420	4.688	2.658	2.341	3.777	0.018
Maine Public Service Company	ME	540,214	0.2%	4.747	4.153	2.262	1.639	3.146	0.005
Granite State Electric Company (National Grid)	NH	833,597	0.3%	4.317	3.826	1.741	1.221	2.717	0.007
New Hampshire Electric Cooperative Inc.	NH	690,095	0.2%	5.547	4.073	3.737	2.751	4.078	0.009
Public Service New Hampshire (Northeast Utilities)	NH	7,751,049	2.4%	3.410	3.297	1.813	1.375	2.392	0.056
Unitil Energy Service, Inc.	NH	1,211,068	0.4%	3.021	3.561	2.091	1.366	2.306	0.008
Narragansett Electric Company (National Grid)	RI	7,964,092	2.4%	3.948	4.285	2.285	1.564	2.830	0.068
Atlantic City Electric Company (Conectiv Power Delivery)	NJ	9,642,644	2.9%	3.301	3.815	1.581	1.443	2.393	0.070
Jersey Central Power & Light Company (FirstEnergy)	NJ	20,859,480	6.3%	2.960	4.790	2.657	2.265	2.825	0.179
Public Service Electric & Gas Company	NJ	42,067,965	12.8%	3.564	3.516	2.428	1.516	2.613	0.334
Rockland Electric Company (Orange & Rockland)	NJ	1,563,289	0.5%	3.529	3.822	3.231	2.831	3.247	0.015
Consolidated Edison Company of New York	NY	43,362,087	13.2%	5.991	5.950	3.972	3.386	4.702	0.619
Duquesne Light Company	PA	13,363,091	4.1%	4.021	3.455	1.865	0.976	2.494	0.101
Metropolitan Edison Company (FirstEnergy)	PA	13,009,872	3.9%	4.072	4.495	2.423	1.376	2.845	0.112
PECO Energy	PA	36,841,017	11.2%	5.227	2.592	1.789	1.508	3.061	0.342
Pennsylvania Electric Company (FirstEnergy)	PA	13,400,384	4.1%	4.042	4.004	2.418	1.453	2.816	0.115
Pennsylvania Power Company (FirstEnergy)	PA	4,258,641	1.3%	3.706	2.069	0.861	0.682	1.986	0.026
Pennsylvania Power & Light Company	PA	35,417,470	10.7%	3.232	3.221	2.761	1.155	2.369	0.255
UGI Utilities, Inc.	PA	978,551	0.3%	3.920	4.614	3.474	1.790	3.108	0.009
West Penn Power Company (Allegheny Power)	PA	19,001,901	5.8%	2.620	1.880	1.656	0.849	1.734	0.100
Total MWh Included in Weighted Average		329,492,640	100.0%						
Mass. Electric Customer Mix		, 2,010	200.070	37.90%	9.52%	14.34%	38.24%	100.00%	

Weighted Average By kWh 3.003

- General Notes

  1) PF = 100% for rate calculations
  2) Time of use splits are based on period definitions. (ie. if peak period=9am-9pm on weekdays, then peak split = 12/24 x 5/7)
  3) In all cases, the tariff selected is based on Massachusetts Electric Company average customers.
  4) In all cases, conservation charges not included.
  5) Residential and Small C&I assumed to be single phase/non-demand metered. Medium & Large C&I assumed to be three phase service, demand metered.
- 6) Where Small C&I tariffs contained demand component, the Massachusetts Electric Company G1 average demand of 5.9 kW was used.
  7) Hours use rates were calculated at average billing demand.

	Residential	Small C&I	Medium C&I	Large C&I
2003 Average Usage				
Billing Demand (kW)	0.0	5.9	50.9	554.7
Total kWh	671	1,328	16,627	228,957
Hrs. Use		225	327	413

Bill Calculations	Distribution Rates		NEW ENGLAND
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Public Service New Hampshi	ire				R	G	G	GV	R		G		G		GV
JULY 2005	RES	SM C&I	MED C&I	LG C&I											
Customer Charge:					\$7.17	\$7.97	\$15.95	\$107.28	\$7.17		\$7.97		\$15.95		\$107.28
Total					\$0.02341				671 \$15.71						
First kWh		500	500	200,000		\$0.04525	\$0.04525	\$0.01371		500	\$22.63	500	\$22.63	200,000	\$2,742.00
Next kWh		1,000	1,000			\$0.01005	\$0.01005			828	\$8.32	1,000	\$10.05		
Excess kWh						\$0.00033	\$0.00033	\$0.00729				15,127	\$4.99	28,957	\$211.10
DEMAND															
First kW		5	5	100		\$0.00	\$0.00	\$0.56		5	\$0.00	5	\$0.00	100	\$56.00
Excess kW						\$5.40	\$5.40	\$0.07		0.9	\$4.86	45.9	\$247.86	454.7	\$31.83
TOTAL									\$22.88		\$43.78		\$301.48		\$3,148.21
EFFECTIVE RATE								-	3.410		3.297		1.813		1.375

<u>Rate</u> R	<u>Description</u> Residential Delivery Service Rate	Availability Subject to the Terms and Conditions of the Tariff of which it is a part, this rate is for Delivery Service in individual urban, rural and farm residences and apartments. Under this rate is available to all those Customers who received all their electric service requirements hereunder, except that controlled electric service for thermal storage devices is available under Load Controlled Delivery Service Rate LCS and outdoor area lighting is available under Outdoor Lighting Delivery Service Rate OL.
G	General Delivery Service Rate	Subject to the Terms and Conditions of the Tariff of which it is a part, this rate is for Delivery Service for any use It is available to (1) those customers at existing delivery points who were receiving service hereunder on General Service Rate G on January 1, 1983, and who have continuously received service under that rate and this successor rate since that date, and (2) all other Customers whose loads as defined for billing purposes do not exceed 100 kilowatts. Service rendered hereunder shall exclude all backup and standby service provided under Backup Delivery Service Rate B. Customers taking service under this rate shall provide any necessary transforming and regulating devices on the Customer's side of the meter. Controlled electric service for thermal storage devices is available under Load Controlled Delivery Service Rate LCS and outdoor area lighting is available under Outdoor Lighting Delivery Service Rate OL.
G	General Delivery Service Rate	Subject to the Terms and Conditions of the Tariff of which it is a part, this rate is for Delivery Service for any use. It is available to (1) those customers at existing delivery points who were receiving service hereunder on General Service Rate G on January 1, 1983, and who have continuously received service under that rate and this successor rate since that date, and (2) all other Customers whose loads as defined for billing purposes do not exceed 100 kilowatts. Service rendered hereunder shall exclude all backup and standby service provided under Backup Delivery Service Rate B. Customers taking service under this rate shall provide any necessary transforming and regulating devices on the Customer's side of the meter. Controlled electric service for thermal storage devices is available under Load Controlled Delivery Service Rate LCS and outdoor area lighting is available under Outdoor Lighting Delivery Service Rate OL.
GV	Primary General Delivery Service Rate	Subject to the Terms and Conditions of the Tariff of which it is a part, this rate is for high voltage delivery service. It is available upon the signing of a Service Agreement for such service at specified delivery points to Customers whose maximum demand shall not exceed 1,000 kilowatts. Service rendered hereunder shall exclude all backup and standby service provided under Backup Delivery Service Rate B. Outdoor area lighting is available under Outdoor Lighting Delivery Service Rate OL.
Notes:	Straightforward mapping of rates.	

MASSACHUSETTS ELECTRIC COMPANY
NANTUCKET ELECTRIC COMPANY
d/b/a NATIONAL GRID
Docket No. D.T.E. 06-\_\_\_
Witness: McCabe

## Exhibit SMM-5 Allocation of Consolidated Edison Delivery Rate Between Distribution and Transmission

d/b/a NATIONAL GRID Docket No. D.T.E. 06-\_\_\_ Exhibit SMM-5 Page 1 of 1

### Allocation of Consolidated Edison Delivery Rate Between Distribution and Transmission

			Rates Effective	May 1, 2004		Rates Effective May 1, 2005			
		Transmission	<u>Distribution</u>	Total <u>T&amp;D</u>	Distribution as a % of Total T&D	Current T&D	<u>Distribution</u>		
		(a)	(b)	(c)	(d)	(e)	(f)		
SC-1 - Residential and	d Religious								
	Customer Charge		\$10.28				\$11.04		
June - September	First 250 kWh	0.747	4.106	4.853	84.61%	5.177	4.380		
	Over 250 kWh	0.819	4.639	5.458	84.99%	5.827	4.952		
October - May	First 250 kWh	0.747	4.106	4.853	84.61%	5.177	4.380		
	Over 250 kWh	0.701	3.763	4.464	84.30%	4.759	4.011		
SC-2 - General Small									
	Customer Charge		\$12.74				\$13.32		
June - September	First 900 kWh	1.190	5.470	6.660	82.13%	6.970	5.724		
	Next 1100 kWh	1.090	4.870	5.960	81.71%	6.230	5.090		
	Excess kWh	0.480	2.260	2.740	82.48%	2.870	2.367		
October - May	First 900 kWh	1.050	4.650	5.700	81.58%	5.960	4.862		
	Next 1100 kWh	0.950	4.050	5.000	81.00%	5.230	4.236		
	Excess kWh	0.340	1.350	1.690	79.88%	1.770	1.413		
SC-9 - General Large									
June - September	All kWh	0.240	1.090	1.330	81.95%	1.420	1.163		
	First 5 kW	\$2.53	\$9.97	\$12.50	79.76%	\$13.34	\$10.63		
	Next 895 kW	\$2.53	\$9.97	\$12.50	79.76%	\$13.34	\$10.63		
October - May	All kWh	0.240	1.090	1.330	81.95%	1.420	1.163		
	First 5 kW	\$2.07	\$7.92	\$9.99	79.28%	\$10.66	\$8.45		
	Next 895 kW	\$2.07	\$7.92	\$9.99	79.28%	\$10.66	\$8.45		

<sup>(</sup>a) Transmission Rates Effective May 1, 2004 per tariff

<sup>(</sup>b) Distribution Rates Effective May 1, 2004 per tariff

<sup>(</sup>c) Column (a) + Column (b)

<sup>(</sup>d) Column (b)  $\div$  Column (c)

<sup>(</sup>e) Transmission and Distribution Rates Effective May 1, 2005 per tariff

<sup>(</sup>f) Column (d) x Column (e)